SEQUENCE LISTING

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<110> University of Utah Research Foundation
      Cognetix, Inc.
      Olivera, Baldomero M.
      McIntosh, J, Michael
      Watkins, Maren
      Garrett, James E.
      Cruz, Lourdes J.
      Grilley, Michelle
      Schoenfeld, Robert M.
      Walker, Craig
      Shetty, Reshma
      Jones, Robert M.
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tcg acc cag gcc ctg gtt gaa cgt gct gga gaa aac cgc tca aag gag
Ser Thr Gln Ala Leu Val Glu Arg Ala Gly Glu Asn Arg Ser Lys Glu
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aac atc aat ttt tta tta aaa aga aag aga gct gct gac agg ggg atg
                                                                          144
Asn Ile Asn Phe Leu Leu Lys Arg Lys Arg Ala Ala Asp Arg Gly Met
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Trp Gly Asp Cys Lys Asp Gly Leu Thr Thr Cys Phe Ala Pro Ser Glu
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        (D or L) or bromo-Trp (D or L)
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aat atc aga ttt tta tca aaa aga aag aca aat get gag egt tgg agg
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gag ggc agt tgc acc tct tgg tta gcg acg tgt acg caa gac cag caa
                                                                          192
Glu Gly Ser Cys Thr Ser Trp Leu Ala Thr Cys Thr Gln Asp Gln Gln
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tcg atc cac Ser Ile Gli	g geg gt n Ala Va 20	al Asn	caa ga Gln Gl	ia aaa Lu Lys	cac His 25	caa Gln	cgg Arg	gca Ala	aag Lys	atc Ile 30	aac Asn	96
ttg ctt tca Leu Leu Se	a aag ag r Lys A: 35	ga aag rg Lys	cca co Pro Pi	et get co Ala 40	gag Glu	cgt Arg	tgg Trp	tgg Trp	cgg Arg 45	tgg Trp	gga Gly	144
gga tgc ato Gly Cys Mer 50	g get to t Ala T	gg ttt rp Phe	ggg as Gly Ly 5	ys Cys	tcg Ser	aag Lys	gac Asp	tcg Ser 60	gaa Glu	tgt Cys	tgt Cys	192
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Leu Ser Ly 35		ys Pro	Pro A	la Glu O	Arg	Trp	Trp	Arg 45	Trp	Gly	Gly	
Cys Met Al 50	a Trp E	Phe Gly	Lys C	ys Ser	Lys	Asp	Ser 60	Glu	Cys	Cys	Ser	
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Asp Ser X	aa Cys 20	Cys Sei	r Asn	Ser Cy 25	s Ası	p Ile	e Th	r Ar	д Су: 30	s Xa	a Leu	

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Ser Thr Gln Ala Leu Ile Gln Gly Gly Gly Asp Glu Arg Gln Lys Ala
aag atc aac ttt ctt tca agg tcg gac cgc gat tgc agg ggt tac gat
                                                                      144
Lys Ile Asn Phe Leu Ser Arg Ser Asp Arg Asp Cys Arg Gly Tyr Asp
            35
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Ala Pro Cys Ser Ser Gly Ala Pro Cys Cys Asp Trp Trp Thr Cys Ser
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Phe Leu Ser Lys Lys Lys Thr Asp Ala Glu Lys Gln Gln Lys Arg Leu
                                 40
                                                                       192
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        50
                             55
tgg aat tgt cat aat ggg cac tgc acg gga tgaactcgga ccacaagcca
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       no-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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                                                                      192
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Ser Glu Gln Cys Val Arg Ser Tyr Cys Ala Met Trp
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 Ile Asn Phe Ser Lys Thr Arg Asn Leu Ala Arg Asn Lys Gln Lys Arg
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Thr Arg Asp Val Asp Asn Gly Gln Leu Thr Asp Asn Arg Arg Asn Leu
                                                                         144
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Gln Ser Lys Trp Lys Pro Val Ser Leu Phe Met Ser Arg Arg Ser Cys
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 acg ttt agc gga tgc aaa att att ttg ata taaacggatt gagtttgctc
                                                                         290
 Thr Phe Ser Gly Cys Lys Ile Ile Leu Ile
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Arg Asp	Val A 35	sp Asn	Gly Gl	n Leu 40	Thr	Asp	Asn	Arg	Arg 45	Asn	Leu	Gln	
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Asn Ser 65	Cys A	sn Glu	His Se	r Asp	Cys	Glu	Ser 75	His	Cys	Ile	Cys	Thr 80	
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caa tcg aag tgg aag cca gtg agt ctc ttc atg tca cga cgg tct t Gln Ser Lys Trp Lys Pro Val Ser Leu Phe Met Ser Arg Arg Ser C 50 60	gt 192 Ys
aac aat tot tgc aat gag cat toc gat tgc gaa toc cat tgt att t Asn Asn Ser Cys Asn Glu His Ser Asp Cys Glu Ser His Cys Ile C 65 70 75	gc 240 :ys
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Lys Trp Lys Pro Val Ser Leu Phe Met Ser Arg Arg Ser Cys Asn $t=1000$	Asn
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                         50
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is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-p
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Leu Leu Leu Leu Val Phe Met Ala Thr Ser His Gln Asp Ala Gly Glu
aag aag geg atg caa agg gac gea ate aac gte aga egg aga aga tea
                                                                         149
Lys Lys Ala Met Gln Arg Asp Ala Ile Asn Val Arg Arg Arg Arg Ser
ctc act cgg gga gta gta act gag gcg tgc gaa gag tcc tgt gag gag
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Leu Thr Arg Gly Val Val Thr Glu Ala Cys Glu Glu Ser Cys Glu Glu
gag gaa aag cac tgc tgc cac gta aat aat gga gta ccc tct tgt gcc Glu Glu Lys His Cys Cys His Val Asn Asn Gly Val Pro Ser Cys Ala
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        is Trp (D or L) or bromo-Trp (D or L)
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Arg Thr Arg Arg Ile Val Thr Glu Ala Cys Glu Glu Ser Cys Glu Asp
                              50
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Glu Glu Lys His Cys Cys His Val Asn Asn Gly Val Pro Ser Cys Ala
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 Val Ile Cys Trp Gly
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 Leu Leu Leu Val Phe Leu Val Thr Ser His Gln Asp Ala Gly Glu
                                                                         149
 aag cag gcg acg gaa agg gac gca atc aac atc aga tgg aga aga tca
 Lys Gln Ala Thr Glu Arg Asp Ala Ile Asn Ile Arg Trp Arg Arg Ser
 ctc act cgg aga ata gta act gag gcg tgc gaa gag cac tgt gag gat
                                                                         197
 Leu Thr Arg Arg Ile Val Thr Glu Ala Cys Glu Glu His Cys Glu Asp
 gag gaa cag ttc tgc tgc ggc tta gag aat gga caa ccc ttt tgt gcc
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 Glu Glu Gln Phe Cys Cys Gly Leu Glu Asn Gly Gln Pro Phe Cys Ala
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Asp Ala	ı Ile 35	Asn	Ile	Arg	Trp	Arg 40	Arg	Ser	Leu	Thr	Arg 45	Arg	Ile	Val	
Thr Glu	ı Ala	Cys	Glu	Glu	His 55	Суз	Glu	Asp	Glu	Glu 60	Gln	Phe	Cys	Cys	
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ctt ct Leu Le	a cti eu Lei	t ctt	gto 1 Va. 15	g tt	c ate	g gc	a ace a Th	c ag r Se 20	t ca r Hi	t ca s Gl:	g ga n As	t gca p Ala	a gg: a Gl: 25	a gag y Glu	101

					caa Gln												149
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ž			tgc Cys		gga Gly	tagi	ttt	etg 1	tacad	etgt	et ta	atte	atta	t tti	tate	agta	300
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ace eag gte atg gtt caa ggt gac gga gat caa eet gea get ege aat
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gca gtg cca aaa gac gat aac cca gat gga gcg agt gga aag ttc atg
                                                                     144
Ala Val Pro Lys Asp Asp Asn Pro Asp Gly Ala Ser Gly Lys Phe Met
aat gtt cta cgt cgg tct gga tgt ccg tgg cat cet tgg tgt ggc
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gca Ala	gtg Val	cca Pro 35	aaa Lys	gac Asp	gat Asp	aac Asn	cca Pro 40	gat Asp	gga Gly	gcg Ala	agt Ser	gga Gly 45	aag Lys	ttc Phe	atg Met	14	14
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	00> a Se		у Су	s Xaa	a Xaa	a Ar	g Xaa	a Xa	a Cy:	5							
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Ala	Val	Pro 35	Arg	Asp	Asp	Asn	Pro 40	Gly	Gly	Thr	Ser	Gly 45	Lys	Phe	Met	
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ac	с са	g gt	c at	g tt	t cg	a ga	t ca	а сс	t gc	a cg	t cg	t ga	t gc	a gt	g cca	96

								21									
Thr Gln	Val	Met 20	Phe	Arg	Asp	Gln	Pro 25	Ala	Arg	Arg	Asp	Ala 30	Val	Pro			
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aga ga	ıc ga	t aa	c cc	a gg	gg;	a ac	g ag	t gg	a aa	g tt	c gt	g aa	t ga	t caa	ι	144	1

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        D or L); Xaa at residue 2 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iod
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 Ile Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Val Asn Glu
 aga geg eet tgg etg gte eet teg aca atc acg act tge tgt gga tat
                                                                      144
 Arg Ala Pro Trp Leu Val Pro Ser Thr Ile Thr Thr Cys Cys Gly Tyr
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H 1976 174

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 <222> (7)..(246)
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 ggatec atg aaa etg acg tge gtg gtg ate ate gee geg etg tte etg
Met Lys Leu Thr Cys Val Val Ile Ile Ala Ala Leu Phe Leu
 acg gcc tgt cag ctc aat aca gct gat gac tcc aga gat aag cag gag
                                                                               96
 Thr Ala Cys Gln Leu Asn Thr Ala Asp Asp Ser Arg Asp Lys Gln Glu
 tac cgt gca gtg agg ttg aga gac gga atg cgg aat ttc aaa ggt tcc Tyr Arg Ala Val Arg Leu Arg Asp Gly Met Arg Asn Phe Lys Gly Ser
                                                                              144
                                                                45
  aag ege aac tge ggg gaa caa ggt gaa ggt tgt get act ege eea tge
                                                                              192
  Lys Arg Asn Cys Gly Glu Gln Gly Glu Gly Cys Ala Thr Arg Pro Cys
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55

50

1772522 . 15

jud.

<220> <221> CDS <222> (1)..(270) <400> 67

a M 1	let	atg Met	tcg Ser	aaa Lys	atg Met 5	gga Gly	gct Ala	atg Met	ttt Phe	gtc Val 10	ctt Leu	ttg Leu	ctt Leu	ctt Leu	ttc Phe 15	atc Ile	48
C	tg Leu	cca Pro	tcc Ser	agc Ser 20	cag Gln	cag Gln	gaa Glu	gga Gly	gat Asp 25	gtc Val	cag Gln	gca Ala	aga Arg	aaa Lys 30	acg Thr	cac His	96
c	etg	aag Lys	aga Arg 35	ggc Gly	ttc Phe	tac Tyr	ggt Gly	act Thr 40	ctg Leu	gca Ala	atg Met	tct Ser	acc Thr 45	aga Arg	gga Gly	tgc Cys	144
t	ct	ggc Gly 50	act	tgc Cys	cat His	cgt Arg	egt Arg 55	gag Glu	gac Asp	ggc Gly	aag Lys	tgt Cys 60	cgg Arg	ggt Gly	act Thr	tgc Cys	192
Z	gac Asp	tac	tcc Ser	gga Gly	tac Tyr	agc Ser 70	tat Tyr	tgt Cys	cgc Arg	tgc Cys	ggt Gly 75	gac Asp	gct Ala	cac His	cat His	ttt Phe 80	240
t	tac	cga Arg	gga Gly	tgc Cys	acg Thr	tgt	tcg Ser	tgt Cys	caa Gln	ggt Gly	tga	ttaa	ttg	actc	tttt	aa	290
	ctc	atta.	aac	αatt		aa a	aaaa	tttt	a qa	acaa	tatq	ttc	qaqa	aaa	accg	aagac	349
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	Leu	Pro	Ser	Ser 20	Gln	Gln	Glu	Gly	Asp 25	Val	Gln	Ala	Arg	Lys 30	Thr	His	
	Leu	Lys	Arg 35	Gly	Phe	Tyr	Gly	Thr 40	Leu	Ala	Met	Ser	Thr 45	Arg	Gly	Cys	
	Ser	Gly 50	Thr	Cys	His	Arç	Arg 55	Glu	ı Asp	Gly	Lys	Cys 60	Arç	Gl?	Thr	Cys	
	Asp 65	Cys	Ser	Gly	7 Tyr	Ser 70	Туг	Cys	arç	Cys	Gl ₃ 75	/ Asp	Ala	His	His	Phe 80	
	Tyr	Arg	Gl)	/ Cys	Thr 85	Cys	Ser	Суя	s Glr	90	7						
	<21 <21 <21 <21	.1>	69 43 PRT Conu	ıs ca	aract	eris	stic	ıs									
			Xaa 3, 2	at : 25 at	resid	5 is	Tyr	, 12								at resid	
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Thr Cys Asp Cys Ser Gly Xaa Ser Xaa Cys Arg Cys Gly Asp Ala His
His Phe Xaa Arg Gly Cys Thr Cys Ser Cys Gln
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atg atg tog aaa atg gga got atg ttt gtc ott ttg ott ott ttc atc
                                                                      48
Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Phe Ile
ctg cca tcc agc cag cag gaa gga gat gtc cag gca aga aaa acg cac
                                                                       96
Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
cgg aag age gge tte tae ggt act etg gea atg tet gee aga gga tge
                                                                      144
Arg Lys Ser Gly Phe Tyr Gly Thr Leu Ala Met Ser Ala Arg Gly Cys
        35
                            40
                                                                      192
tet gge act tge cat egt egt gag gac gge aag tgt egg ggt act tge
Ser Gly Thr Cys His Arg Arg Glu Asp Gly Lys Cys Arg Gly Thr Cys
    50
                                                                      240
gac tgc tcc gga tac agc tat tgt cgc tgc ggt gac gct cac cat ttt
Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe
tac cga gga tgc acg tgt aca tgt taaggttgat taattgactc ttttaactcg
                                                                      294
Tyr Arg Gly Cys Thr Cys Thr Cys
ttgaaccgat taaaaaaaaa attagacgaa tatgttcgag aaaaccgaag ac
                                                                      346
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<213> Conus caracteristicus
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Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Phe Ile
Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
             20
Arg Lys Ser Gly Phe Tyr Gly Thr Leu Ala Met Ser Ala Arg Gly Cys
Ser Gly Thr Cys His Arg Arg Glu Asp Gly Lys Cys Arg Gly Thr Cys
Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe
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Tyr Arg Gly Cys Thr Cys Thr Cys

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72
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<213> Conus caracteristicus
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<223> Xaa at residue 10 is Glu or gamma-carboxy-Glu; Xaa at residues 23
       , 25 and 35 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulph
       o-Tyr or O-phospho-Tyr
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Gly Cys Ser Gly Thr Cys His Arg Arg Xaa Asp Gly Lys Cys Arg Gly
Thr Cys Asp Cys Ser Gly Xaa Ser Xaa Cys Arg Cys Gly Asp Ala His
His Phe Xaa Arg Gly Cys Thr Cys Thr Cys
      73
<210>
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<400> 73
atg atg tcg aaa atg gga gct atg ttt gtc ctt ttg ctt ctt ttc atc
                                                                          48
Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Phe Ile
                                                                          96
ctg cca tcc agc cag cag gaa gga gat gtc cag gca aga aaa acg cac
Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
             20
                                                                         144
cgg aag age ggc ttc tac ggt act ctg gca atg tct acc aga gga tgc
Arg Lys Ser Gly Phe Tyr Gly Thr Leu Ala Met Ser Thr Arg Gly Cys
                                                                         192
tet oge act toe egt egt eat egg gae gge aag tot egg ggt act toe
Ser Gly Thr Cys Arg Arg His Arg Asp Gly Lys Cys Arg Gly Thr Cys
                                                                         240
gae tge tee gga tac age tat tgt ege tge ggt gae get cac eat ttt
Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe
tac cga gga tgc acg tgt aca tgt taaggttgat taattcgatc ttttaactcg
                                                                         294
Tyr Arg Gly Cys Thr Cys Thr Cys
ttqaacqatt aaaaaaaaa ttttaqacga atatgttcga gaaaaaccga agac
                                                                         348
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        74
       88
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<400> 74
Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Phe Ile
Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
Arg Lys Ser Gly Phe Tyr Gly Thr Leu Ala Met Ser Thr Arg Gly Cys
Ser Gly Thr Cys Arg Arg His Arg Asp Gly Lys Cys Arg Gly Thr Cys
Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe
Tyr Arg Gly Cys Thr Cys Thr Cys
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      42
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<222>
       (1)..(42)
      Xaa at residues 23, 25 and 35 is Tyr, 125I-Tyr, mono-iodo-Tyr, di
       -iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
Gly Cys Ser Gly Thr Cys Arg Arg His Arg Asp Gly Lys Cys Arg Gly
Thr Cys Asp Cys Ser Gly Xaa Ser Xaa Cys Arg Cys Gly Asp Ala His
His Phe Xaa Arg Gly Cys Thr Cys Thr Cys
<210> 76
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       349
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<222> (1)..(264)
<400> 76
atg atg tcg aaa atg gga gct atg ttt gtc ctt ttg ctt ctt ttc atc
                                                                       48
Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Phe Ile
ctg cca tcc agc cag cag gaa gga gat gtc cag gca aga aaa acg cac
                                                                       96
Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
ctg aag aga ggc ttc tac ggt act ctg gca atg tct acc aga gga tgc
                                                                      144
 Leu Lys Arg Gly Phe Tyr Gly Thr Leu Ala Met Ser Thr Arg Gly Cys
                             40
 tot ggc act tgc cgt cgt cat cgg gac ggc aag tgt cgg ggt act tgc
                                                                      192
 Ser Gly Thr Cys Arg Arg His Arg Asp Gly Lys Cys Arg Gly Thr Cys
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gac tgc tcc gga tac agc tat tgt cgc tgc ggt gac gct cac cat ttt
                                                                     240
Asp Cvs Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe
tac cga gga tgc acg tgt aca tgt taaggttgat taattgactc ttttaactcg
                                                                     294
Tyr Arg Gly Cys Thr Cys Thr Cys
                                                                     349
ttgaacgatt aaaaaaaaaa attttagagc aatatgttcg agaaaaaccg aagac
      77
<210>
<211>
      88
<212>
      PRT
<213>
      Conus caracteristicus
<400> 77
Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Phe Ile
Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
Leu Lys Arg Gly Phe Tyr Gly Thr Leu Ala Met Ser Thr Arg Gly Cys
Ser Gly Thr Cys Arg Arg His Arg Asp Gly Lys Cys Arg Gly Thr Cys
Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe
Tyr Arg Gly Cys Thr Cys Thr Cys
                85
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       78
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       42
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<223> Xaa at residues 23, 25 and 35 is Tyr, 125I-Tyr, mono-iodo-Tyr, di
        -iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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Gly Cys Ser Gly Thr Cys Arg Arg His Arg Asp Gly Lys Cys Arg Gly
 Thr Cys Asp Cys Ser Gly Xaa Ser Xaa Cys Arg Cys Gly Asp Ala His
 His Phe Xaa Arg Gly Cys Thr Cys Thr Cys
       79
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240
gac tgc tcc gga tac agc tat tgt cgc tgc ggt gac gct cac cat ttt
Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe
tac cga gga tgc acg tgt aca tgt taaggttgat taattgactc ttttaactcg
                                                                      294
Tyr Arg Gly Cys Thr Cys Thr Cys
ttgaacgatt aaaaaaaaa attttagagc aatatgttcg agaaaaaccg aagac
                                                                      349
      77
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      PRT
<213> Conus caracteristicus
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Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Phe Ile
Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His 20 25 30
Leu Lys Arg Gly Phe Tyr Gly Thr Leu Ala Met Ser Thr Arg Gly Cys
Ser Gly Thr Cys Arg Arg His Arg Asp Gly Lys Cys Arg Gly Thr Cys
Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe 65 70 75 80
Tyr Arg Gly Cys Thr Cys Thr Cys
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<223> Xaa at residues 23, 25 and 35 is Tyr, 125I-Tyr, mono-iodo-Tyr, di
       -iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 78
Gly Cys Ser Gly Thr Cys Arg Arg His Arg Asp Gly Lys Cys Arg Gly
Thr Cys Asp Cys Ser Gly Xaa Ser Xaa Cys Arg Cys Gly Asp Ala His
His Phe Xaa Arg Gly Cys Thr Cys Thr Cys
<210>
       79
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       345
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<220>
<221> CDS
<222> (1)..(264)
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atg atg tcg aaa atg gga gct atg ttt gtc ctt ttg ttt ctt ttc acc
                                                                             48
Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Phe Leu Phe Thr
                                                                             96
ctg cca tcc agc cag cag gaa gga gat gtc cag gca aga aaa acg cac
Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arq Lys Thr His
ctg aag aga ggc ttc tac ggt act ctg gca atg tct tcc aga gga tgc
Leu Lys Arg Gly Phe Tyr Gly Thr Leu Ala Met Ser Ser Arg Gly Cys
                                                                            144
tot gge act tge eat egt egt gag gac gge aag tgt egg ggt act tge
Ser Gly Thr Cys His Arg Arg Glu Asp Gly Lys Cys Arg Gly Thr Cys
gac tgc tcc gga tac agc tat tgt cgc tgc ggt gac gct cac cat ttt Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe
                                                                            240
tac cga gga tgt acg tgt aca tgt taaggttgat taattgactc ttttaactcg
                                                                            294
Tyr Arg Gly Cys Thr Cys Thr Cys
ttgaacgatt aaaaaaaaat ttagagcaat atgttcgaga aaaccgaaga c
                                                                            345
<210> 80
<211> 88
<212> PRT
<213> Conus caracteristicus
<400> 80
Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Phe Leu Phe Thr
Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
Leu Lys Arg Gly Phe Tyr Gly Thr Leu Ala Met Ser Ser Arg Gly Cys
Ser Gly Thr Cys His Arg Arg Glu Asp Gly Lys Cys Arg Gly Thr Cys
Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe
Tyr Arg Gly Cys Thr Cys Thr Cys
                  85
<210> 81
<211> 42
<212> PRT
<213> Conus caracteristicus
<220>
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<222>
        (1)..(42)
<223> Xaa at residue 10 is Glu or gamma-carboxy-Glu; Xaa at residues 23
        , 25 and 35 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulph
        o-Tyr or O-phospho-Tyr
<400> 81
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Gly Cys Ser Gly Thr Cys His Arg Arg Xaa Asp Gly Lys Cys Arg Gly

10 15 Thr Cys Asp Cys Ser Gly Xaa Ser Xaa Cys Arg Cys Gly Asp Ala His His Phe Xaa Arg Gly Cys Thr Cys Thr Cys <210> 82 344 <211> <212> DNA <213> Conus caracteristicus <220> <221> CDS <222> (1)..(264) <400> 82 atg atg tcg aaa atg gga gct atg ttt gtc ctt ttg ctt ctt ttc atc Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Leu Phe Ile ctq cca tcc agc caq caq qaa qqa qat qtc caq qca aga aaa acq cac 96 Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His 144 ctg aag agc ggc ttc tac ggt act ctg gca atg tct gcc aga gga tgc Leu Lys Ser Gly Phe Tyr Gly Thr Leu Ala Met Ser Ala Arg Gly Cys tct ggc act tgc cat cgt cgt caa aac ggc gag tgt cag ggt act tgc Ser Gly Thr Cys His Arg Arg Gln Asn Gly Glu Cys Gln Gly Thr Cys 192 gac tgc gac gga cac gac cat tgt gac tgc ggt gac act ctc ggt act Asp Cys Asp Gly His Asp His Cys Asp Cys Gly Asp Thr Leu Gly Thr 240 tac tca gga tgc gtg tgt ata tgt taaggttgat taattgactc ttttaactcg 294 Tyr Ser Gly Cys Val Cys Ile Cys ttgaacgatt aaaaaaattt agagcaatat gttcgagaaa aaccgaagac 344 <210> 83 <211> 88 <212> PRT <213> Conus caracteristicus <400> 83 Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Phe Ile Leu Pro Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His Leu Lys Ser Gly Phe Tyr Gly Thr Leu Ala Met Ser Ala Arg Gly Cys Ser Gly Thr Cys His Arg Arg Gln Asn Gly Glu Cys Gln Gly Thr Cys Asp Cys Asp Gly His Asp His Cys Asp Cys Gly Asp Thr Leu Gly Thr

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Tyr Ser Gly Cys Val Cys Ile Cys
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<211>
       42
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<221> PEPTIDE
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       is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-p
<400> 84
Gly Cys Ser Gly Thr Cys His Arg Arg Gln Asn Gly Xaa Cys Gln Gly
Thr Cys Asp Cys Asp Gly His Asp His Cys Asp Cys Gly Asp Thr Leu
Gly Thr Xaa Ser Gly Cys Val Cys Ile Cys
<210> 85
       422
<211>
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ctg ctg ttt gcc ttg gac aac ttc gtt ggg gtc cag cca gga cag ata
Leu Leu Phe Ala Leu Asp Asn Phe Val Gly Val Gln Pro Gly Gln Ile
                                                                           96
15
aca aga gat gtg gac aac cgc cgt aac cgg caa tcg cga tgg aag cca
                                                                          144
Thr Arg Asp Val Asp Asn Arg Arg Asn Arg Gln Ser Arg Trp Lys Pro
agg agt etc ttc aag tca ett cat aaa ega gca teg tgt gga ggg act
                                                                          192
Arg Ser Leu Phe Lys Ser Leu His Lys Arg Ala Ser Cys Gly Gly Thr
tgc acg gaa agt gcc gat tgc cct tcc acg tgt agt act tgc tta cat
                                                                          240
Cýs Thr Glu Ser Ála Ásp Cýs Pro Ser Thr Cýs Ser Thr Cýs Leu His
gct caa tgc gag tca aca tgatgtcgca ctacagctct tctctacagt Ala Gln Cys Glu Ser Thr
                                                                          288
    80
gtgtacatcg accgtacgac gcatctttta tttctttggc tgtttcattc gttttcttgt
gttcataaca tgcggagccc ttccgttacc tctactgctc tacacttaac ctgataacca
                                                                          408
gaaaatccag tact
                                                                          422
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<210> 86
<211> 84
<212> PRT
<213> Conus caracteristicus
<400> 86
Met His Leu Ser Leu Ala Arg Ser Ala Val Leu Met Leu Leu Leu Leu
Phe Ala Leu Asp Asn Phe Val Gly Val Gln Pro Gly Gln Ile Thr Arg
             20
Asp Val Asp Asn Arg Arg Asn Arg Gln Ser Arg Trp Lys Pro Arg Ser
Leu Phe Lys Ser Leu His Lys Arg Ala Ser Cys Gly Gly Thr Cys Thr
Glu Ser Ala Asp Cys Pro Ser Thr Cys Ser Thr Cys Leu His Ala Gln
Cys Glu Ser Thr
<210> 87
<211>
       28
<212> PRT
<213> Conus caracteristicus
<220>
<221>
      PEPTIDE
<222>
       (1)..(28)
<223>
      Xaa at residues 9 and 26 is Glu or gamma-carboxy-Glu; Xaa at resi
       due 14 is Pro or hydroxy-Pro
<400> 87
Ala Ser Cys Gly Gly Thr Cys Thr Xaa Ser Ala Asp Cys Xaa Ser Thr
Cys Ser Thr Cys Leu His Ala Gln Cys Xaa Ser Thr
<210> 88
<211> 426
<212> DNA
<213> Conus caracteristicus
<220>
<221> CDS
<222>
      (7)..(258)
<400> 88
gttaca atg cat ctg tca ctg gca cgc tca gct gtt ttg atg ttg ctt
                                                                           48
       Met His Leu Ser Leu Ala Arg Ser Ala Val Leu Met Leu Leu
ctg ctg ttt gcc ttg gac aac ttc gtt ggg gtc caa cca gga cag ata
                                                                          96
Leu Leu Phe Ala Leu Asp Asn Phe Val Gly Val Gln Pro Gly Gln Ile
act aga gat gtg gac aac cgc cgt aac ctg caa tcg cga tgg aag cca
act aga gat gtg gac aac cgc cgc aac cgc aac cgc aac Try Lys Pro
Thr Arg Asp Val Asp Asn Arg Arg Asn Leu Gln Ser Arg Trp Lys Pro
45
                                                                          144
agg agt ctc ttc aag tca ctt cat aaa cga gca tcg tgt gga ggg act
                                                                         192
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Arg Ser Leu Phe Lys Ser Leu His Lys Arg Ala Ser Cys Gly Gly Thr
tgc acg gaa agt gcc gat tgc cct tcc acg tgt agt act tgc tta cat
                                                                      240
Cys Thr Glu Ser Ala Asp Cys Pro Ser Thr Cys Ser Thr Cys Leu His
get caa tge gag tga aca tgatgtegea ctacagetet tetetacagt :
                                                                      288
Ala Gln Cys Glu
gtgtacateg accgaccgta cgacgcatct tttatttctt tgtctgtttc attegtttc
                                                                      348
ttgaqttcat aacatgogga goodttoogt tacototact gototacact taagctgata
                                                                      408
accagaaaat ccagtact
                                                                      426
<210> 89
<211>
      82
<212>
      PRT
<213>
      Conus caracteristicus
<400> 89
Met His Leu Ser Leu Ala Arg Ser Ala Val Leu Met Leu Leu Leu Leu
Phe Ala Leu Asp Asn Phe Val Gly Val Gln Pro Gly Gln Ile Thr Arg
Asp Val Asp Asn Arg Arg Asn Leu Gln Ser Arg Trp Lys Pro Arg Ser
Leu Phe Lys Ser Leu His Lys Arg Ala Ser Cys Gly Gly Thr Cys Thr
Glu Ser Ala Asp Cys Pro Ser Thr Cys Ser Thr Cys Leu His Ala Gln
Cys Glu
<210> 90
<211>
       25
<212>
       PRT
<213> Conus caracteristicus
<220>
<221>
       PEPTIDE
<222>
       (1)..(25)
<223>
       Xaa at residues 8 and 25 is Glu or gamma-carboxy-Glu; Xaa at resi
       due 13 is Pro or hydroxy-Pro
<400> 90
Ser Cys Gly Gly Thr Cys Thr Xaa Ser Ala Asp Cys Xaa Ser Thr Cys
Ser Thr Cys Leu His Ala Gln Cys Xaa
            20
<210>
       91
<211>
       220
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       DNA
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<220>
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      (28)..(189)
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tgtgtgtgtg tggttctggg tccagca ttt gat ggc agg aat gcc gca gtc aac
                                                                  54
                            Phe Asp Gly Arg Asn Ala Ala Val Asn
gag aga gcg cct tgg acg gtc gtt ttg tcc acc acg aat tgc tgc ggt
                                                                  102
Glu Arg Ala Pro Trp Thr Val Val Leu Ser Thr Thr Asn Cys Cys Gly
tat aat acg atg gaa ttc tgc cct gct tgc atg tgc act tat tcc tgt
                                                                  150
Tyr Asn Thr Met Glu Phe Cys Pro Ala Cys Met Cys Thr Tyr Ser Cys
Pro Lys Lys Lys Pro Gly Lys Gly Arg Arg Asn Asn
ggaccetetg aaccacgacg t
                                                                  220
<210> 92
<211> 54
<212> PRT
<213> Conus circumcisus
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Phe Asp Gly Arg Asn Ala Ala Val Asn Glu Arg Ala Pro Trp Thr Val
Val Leu Ser Thr Thr Asn Cys Cys Gly Tyr Asn Thr Met Glu Phe Cys
Pro Ala Cys Met Cys Thr Tyr Ser Cys Pro Lys Lys Lys Pro Gly
Lys Gly Arg Arg Asn Asn
<210> 93
<211> 43
<212> PRT
<213> Conus circumcisus
<220>
<221> PEPTIDE
<222>
      (1)..(43)
<223> Xaa at residue 19 is Glu or gamma-carboxy-Glu; Xaa at residues 2,
       22, 31 and 36 is Pro or hydroxy-Pro; Xaa at residue 3 is Trp (D
       or L) or bromo-Trp (D or L); Xaa at residues 15 adn 28 is Tyr, 12
       5I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
Ala Xaa Xaa Thr Val Val Leu Ser Thr Thr Asn Cys Cys Gly Xaa Asn
Thr Met Xaa Phe Cys Xaa Ala Cys Met Cys Thr Xaa Ser Cys Xaa Lys
Lys Lys Lys Xaa Gly Lys Gly Arg Arg Asn Asn
                          40
<210> 94
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<211> 64
<212> PRT
<213> Conus consors
<400> 94
Gly Ile Phe Val Gly Val Gln Pro Glu Gln Ile Thr Arg Asp Val Asp
Lys Gly Tyr Ser Thr Asp Asp Gly His Asp Leu Leu Ser Leu Leu Lys
Gln Ile Ser Leu Arg Ala Cys Thr Gly Ser Cys Asn Ser Asp Ser Glu
Cys Tyr Asn Phe Cys Asp Cys Ile Gly Thr Arg Cys Glu Ala Gln Lys
<210>
       95
<211>
       27
<212>
       PRT
<213> Conus consors
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<222>
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<223> Xaa at residues 11 and 24 is Glu or gamma-carboxy-Glu; Xaa at res
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       r or O-phospho-Tyr
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Asp Cys Ile Gly Thr Arg Cys Xaa Ala Gln Lys
<210>
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<213> Conus delesstii
<220>
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       PEPTIDE
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       (1)...(27)
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<223>
       idue 4 is Pro or hydroxy-Pro; Xaa at residue 25 is Tyr, 125I-Tyr,
        mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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Cys Cys Ser Gly Phe Cys Leu Ile Xaa Arg Cys
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ctt cta ctt ctt gtg ccc atg gca acc agt caa cag gat gga gga gag Leu Leu Leu Val Pro Met Ala Thr Ser Gln Gln Asp Gly Glu 15 20 25	101
aag cag gcg atg caa agg gac gca atc aac gtc gca cca gga aca tca Lys Gln Ala Met Gln Arg Asp Ala Ile Asn Val Ala Pro Gly Thr Ser $$30$$	149
atc act cgg aga aat gta gat cag gag tgc att gac gcc tgt cag ctg Ile Thr Arg Arg Asn Val Asp Gln Glu Cys Ile Asp Ala Cys Gln Leu $$45$$	197
gag gac aag aat tgc tgt ggc aga aca gat gga gaa ccc aga tgt gcg Glu Asp Lys Asn Cys Cys Gly Arg Thr Asp Gly Glu Pro Arg Cys Ala 60 70	245
aaa atc tgc ctc gga taatttctgt acgctgtctc attcattatt tcatccgtac Lys Ile Cys Leu Gly $$ 75	300
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Met Ser Gly Leu Gly Ile Met Val Leu Thr Leu Leu Leu Leu Val Pro 1 15 Met Ala Thr Ser Gln Gln Asp Gly Gly Glu Lys Gln Ala Met Gln Arg 20 25 Asp Ala Ile Asn Val Ala Pro Gly Thr Ser Ile Thr Arg Arg Asn Val	
Met Ser Gly Leu Gly Ile Met Val Leu Thr Leu Leu Leu Leu Val Pro 1 1 1 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	
Met Ser Gly Leu Gly Ile Met Val Leu Thr Leu Leu Leu Leu Val Pro 1 10 15 Met Ala Thr Ser Gln Gln Asp Gly Gly Glu Lys Gln Ala Met Gln Arg 20 25 Asp Ala Ile Asn Val Ala Pro Gly Thr Ser Ile Thr Arg Arg Asn Val 35 Asp Gln Glu Cys Ile Asp Ala Cys Gln Leu Glu Asp Lys Asn Cys Cys 50 Gly Arg Thr Asp Gly Glu Pro Arg Cys Ala Lys Ile Cys Leu Gly	
Met Ser Gly Leu Gly Ile Met Val Leu Thr Leu Leu Leu Leu Val Pro 10 15 Met Ala Thr Ser Gln Gln Asp Gly Gly Glu Lys Gln Ala Met Gln Arg 20 Asp Ala Ile Asn Val Ala Pro Gly Thr Ser Ile Thr Arg Arg Asn Val Asp Gln Glu Cys Ile Asp Ala Cys Gln Leu Glu Asp Lys Asn Cys Cys 50 Gly Arg Thr Asp Gly Glu Pro Arg Cys Ala Lys Ile Cys Leu Gly 75 C210> 99 <211> 99 <211> PRT	ı at
Met Ser Gly Leu Gly Ile Met Val Leu Thr Leu Leu Leu Leu Val Pro 10 15 15 16 Met Ala Thr Ser Gln Gln Asp Gly Gly Glu Lys Gln Ala Met Gln Arg 20 25 Gln Glu Lys Gln Ala Met Gln Arg 20 Asp Ala Ile Asn Val Ala Pro Gly Thr Ser Ile Thr Arg Arg Asn Val Asp Gln Glu Cys Ile Asp Ala Cys Gln Leu Glu Asp Lys Asn Cys Cys 50 60 Gly Arg Thr Asp Gly Glu Pro Arg Cys Ala Lys Ile Cys Leu Gly 75 75 (2110 99 211) 32 (212) PRT (213) Conus distans (222) PEPTIDE (222) (1)(32) (223) Xaa at residues 5, 13 and 24 is Glu or gamma-carboxy-Glu; Xaa 2233 Xaa at residues 5, 13 and 24 is Glu or gamma-carboxy-Glu; Xaa 2233 Xaa at residues 5, 13 and 24 is Glu or gamma-carboxy-Glu; Xaa 2233 Xaa at residues 5, 13 and 24 is Glu or gamma-carboxy-Glu; Xaa	ı at

			20					25					30			
<210 <211 <212 <213	> : > i	LOO 376 ONA Conus	dis	tans	;											
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aag Lys	cag Gln	gcg Ala	atg Met 30	caa Gln	agg Arg	gac Asp	gca Ala	atc Ile 35	aac Asn	gtc Val	gca Ala	cca Pro	gga Gly 40	aca Thr	tca Ser	149
		cgg Arg 45														197
		aag Lys														245
	atc	tgc Cys			taat		gt a	eget	gtct	c gt		tatt	te	rtcaç	gtac	300
gagt	tta	aac ç	gagad	ectat	t aç	gaaaq	gtoga	a ago	gtteg	jtgc	ttaa	atttç	gat a	agca	ttgtt	360
tgct	ggg	atg a	acgo	ja .												376
<210 <211 <212 <213	> :	L01 79 PRT Conus	dis	stans	,											
<400		101	T	G1	71.	Mak	77-7	*	m)						_	
1	ser	Gly	reu	5 5	тте	Met	val	ьeu	10	ьеи	ьеи	Leu	Leu	Va1 15	Pro	
Met	Ala	Thr	Ser 20	Gln	Gln	Asp	Gly	Gly 25	Glu	Lys	Gln	Ala	Met 30	Gln	Arg	
Asp	Ala	Ile 35	Asn	Val	Ala	Pro	Gly 40	Thr	Ser	Ile	Thr	Arg 45	Thr	Glu	Thr	
Asp	Gln 50	Glu	Cys	Ile	Asp	Ile 55	Cys	Lys	Gln	Glu	Asp 60	Lys	Lys	Cys	Cys	
Gly 65	Arg	Ser	Asn	Gly	Glu 70	Pro	Thr	Cys	Ala	Lys 75	Ile	Cys	Leu	Gly		
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<400> Xaa Thr 1	102 Asp	Gln	Xaa 5	Cys	Ile	Asp	Ile	Cys 10	Lys	Gln	Xaa	Asp	Lys 15	Lys	
Cys Cys	Gly	Arg 20	Ser	Asn	Gly	Xaa	Xaa 25	Thr	Cys	Ala	Lys	Ile 30	Cys	Leu	
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ctt cta Leu Leu	ctt Leu	ctt Leu	gtg Val 15	ccc Pro	atg Met	gca Ala	acc Thr	agt Ser 20	caa Gln	cag Gln	gat Asp	gga Gly	gga Gly 25	gag Glu	101
aag cag Lys Glr															149
atc act Ile Thi															197
gag gad Glu Asp 60	aag Lys	aaa Lys	tgc Cys	tgc Cys	ggc Gly 65	aga Arg	aca Thr	aat Asn	gga Gly	gaa Glu 70	ccc Pro	gta Val	tgt Cys	gcg Ala	245
aaa ato Lys Ile 75	tgc Cys	ttc Phe	gga Gly	taat	ttet	gt a	acgct	gtct	c at	tcat	aatt	te	atca	gtac	300
gagttta	aac (gaga	cctat	tt aç	gaaa	gtcga	a ago	gtte	gtgc	ttaa	atttç	gat a	aagca	attgtt	360
tgctgg	gatg a	aacg	ga												376
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Met Ala	1 Thr	Ser 20	Gln	Gln	Asp	Gly	Gly 25	Glu	Lys	Gln	Ala	Met 30	Gln	Arg	
Asp Ala	Ile 35	Asn	Val	Ala		Gly 40	Thr	Ser	Ile		Arg	Arg	Glu	Thr	

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       Xaa at residue 25 is Pro or hydroxy-Pro
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Cys Cys Gly Arg Thr Asn Gly Xaa Xaa Val Cys Ala Lys Ile Cys Phe
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                                                                       48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
ttc act tca gat cgt gca tcg gat gac agg aat acc aac gac aaa gca
                                                                       96
Phe Thr Ser Asp Arg Ala Ser Asp Asp Arg Asn Thr Asn Asp Lys Ala
tct cgc ctg ctc tct cac gtt gtc agg gga tgc tgt ggt aag tat ccc
                                                                      144
 Ser Arg Leu Leu Ser His Val Val Arg Gly Cys Cys Gly Lys Tyr Pro
                             40
192
tgt gac aga ccc agt ggt gga cgc tgatgctcca ggaccctctg Cys Asp Arg Pro Ser Gly Gly Arg _{\rm 70} Arg
                                                                      239
aaccacgacg t
                                                                      250
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Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
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<212> PRT

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Cys Asp Arg Pro Ser Gly Gly Gly Arg
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     30
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<222>
      (1)..(30)
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       -sulpho-Tyr or O-phospho-Tyr
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Thr Val Gly Arg Xaa Xaa Xaa Cys Asp Arg Xaa Ser Gly Gly
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       DNA
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ctg ttt ccc ctt act gct ctt cca ctg gat gga gaa caa cct gta gac
                                                                       96
Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Glu Gln Pro Val Asp
ega cat gee gag cat atg cag gat gac aat tea get gea cag aac eee
                                                                      144
Arg His Ala Glu His Met Gln Asp Asp Asn Ser Ala Ala Gln Asn Pro
tgg gtt att gcc atc aga cag tgt tgc acg ttc tgc aac ttt gga tgc
                                                                     192
Trp Val Ile Ala Ile Arg Gln Cys Cys Thr Phe Cys Asn Phe Gly Cys
caq cct tgt tgc gtc ccc tgataacgtg ttgatgacca actttctcga g
                                                                      241
Gln Pro Cys Cys Val Pro
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Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Glu Gln Pro Val Asp
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Arg His Ala Glu His Met Gln Asp Asp Asn Ser Ala Ala Gln Asn Pro
Trp Val Ile Ala Ile Arg Gln Cys Cys Thr Phe Cys Asn Phe Gly Cys
Gln Pro Cys Cys Val Pro
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        Pro or hydroxy-Pro
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Xaa Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Xaa Cys Cys Val Xaa
<210> 112
<211> 404
<212> DNA
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Leu Phe Leu Thr Ala Cys Gln Leu Ile Ala Ala Asp Asp Ser Arg Asp
aac cag aag cac cgt gca gtg agg atg aga gac gca ttg aag aat ttc
                                                                         146
Asn Gln Lys His Arg Ala Val Arg Met Arg Asp Ala Leu Lys Asn Phe
aaa gat too agg gog tgo too ggt aga ggt tot aga tgt cot coc caa
                                                                         194
Lys Asp Ser Arg Ala Cys Ser Gly Arg Gly Ser Arg Cys Pro Pro Gln
                         50
tgc tgc atg ggt ttg acg tgc ggt cgt gag tat cca ccc aga tgc ggt
                                                                        242
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Cys Cys Met Gly Leu Thr Cys Gly Arg Glu Tyr Pro Pro Arg Cys Gly
                   65
                                                                   302
tgatatacgg tgaacaactg atatttcccc tctgtgctct accctctttt gcctgattca
cccacaccta tgtgtggtca tgaaccactc agtacctaca cctctggtgg cttcagagga
                                                                   362
                                                                   404
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      75
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      PRT
<213> Conus geographus
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Cys Gln Leu Ile Ala Ala Asp Asp Ser Arg Asp Asn Gln Lys His Arg
Ala Val Arg Met Arg Asp Ala Leu Lys Asn Phe Lys Asp Ser Arg Ala
Cys Ser Gly Arg Gly Ser Arg Cys Pro Pro Gln Cys Cys Met Gly Leu
Thr Cys Gly Arg Glu Tyr Pro Pro Arg Cys Gly
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      27
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       , 11, 24 and 25 is Pro or hydroxy-Pro; Xaa at residue 23 is Tyr,
       125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-T
       yr
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Leu Thr Cys Gly Arg Xaa Xaa Xaa Arg Cys
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<210> 116
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gcg acc acg gcc acg tgc atg aag tcc aac aag ggg gag atc tac tcc
                                                                      96
Ala Thr Thr Ala Thr Cys Met Lys Ser Asn Lys Gly Glu Ile Tyr Ser
tat gcg tgc ggc tac tgc ggc aag aag aag gag agc tgt ttc ggc gac
Tyr Ala Cys Gly Tyr Cys Gly Lys Lys Glu Ser Cys Phe Gly Asp
aaa aag cca gtg act gac tac cag tgc cag acg cgg aac att ccc aac
                                                                     192
Lys Lys Pro Val Thr Asp Tyr Gln Cys Gln Thr Arg Asn Ile Pro Asn
ccc tgc ggc ggc gct gct ctc tgaaggcacc aacagcacca acagcacgat
                                                                     243
Pro Cys Gly Gly Ala Ala Leu
ctcctqtqtt tcqtcactqc atttatqacq tcaaaaccac qtcatqcatq atqacqacqa
                                                                     303
tctcggctat ggcatgtatt gaagaatgga aataaaccta gttttcagct gaaaaaa
                                                                     360
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Ala Thr Thr Ala Thr Cys Met Lys Ser Asn Lys Gly Glu Ile Tyr Ser
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Lys Lys Pro Val Thr Asp Tyr Gln Cys Gln Thr Arg Asn Ile Pro Asn
Pro Cys Gly Gly Ala Ala Leu
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<223>
        at residues 3, 51, 63 and 65 is Pro or hydroxy-Pro; Xaa at resid
       ues 31, 33, 37 and 55 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Ty
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r, O-sulpho-Tyr or O-phospho-Tyr

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Lys Lys Xaa Val Thr Asp Xaa Gln Cys Gln Thr Arg Asn Ile Xaa Asn
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                                                                      114
                                         Met Gly Met Arg Met Xaa
ttt agt gtg ttt eng cag gtt gte ntg ggn ace act gte gtt tee tte
                                                                      162
Phe Ser Val Phe Xaa Gln Val Val Xaa Gly Thr Thr Val Val Ser Phe
acn tca cgt cgt ggt cca aaa tct cgt cgc ggg gaa cct att ccg acc
Xaa Ser Arg Arg Gly Pro Lys Ser Arg Arg Gly Glu Pro Ile Pro Thr
        25
act gta atc aac tac ggg gag tgc tgt aag gat cca tcc tgt tgg gtt
                                                                      258
Thr Val Ile Asn Tyr Gly Glu Cys Cys Lys Asp Pro Ser Cys Trp Val
    40
aag gtg aag gat ttc cag tgt cct gga gca agt cct ece aac
                                                                      300
Lys Val Lys Asp Phe Gln Cys Pro Gly Ala Ser Pro Pro Asn
tgaaccacga catgtcgccc tctgcctgac ctgcttcacg ttccgtctct ttctgccact
agaactcaac aactcgatcc aacagactcc tactttacct ccgtattctg aaactacttg
                                                                      420
gatttgattg tetttaatat etacteaeac ttgetgttat tacateatee aaaatttaae
aagaacatga aaggtgtctg ttcaaacaaa atcaggcaat gacaangggg gaaagtctcc
                                                                      540
antitaticty aaaactytica cottyticacto tottaaccay gittanaact gantaccact
                                                                      600
anagotytty thocacatca ngatcagnoc aatttytann gtttoottty caaaactttt
                                                                      660
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gcctgaaatt cttgaaaaga aacgctcaca atgttgggaa gtgcttttna ttanctgaca
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Asp Pro Ser Cys Trp Val Lys Val Lys Asp Phe Gln Cys Pro Gly Ala
Ser Pro Pro Asn
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<222>
       (1) .. (36)
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        e 21 is Trp (D or L) or bromo-Trp (D or L);
<220>
       PEPTIDE
<221>
       (1)..(36)
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<223>
       Xaa at residue 11 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O
        -sulpho-Tyr or O-phospho-Tyr
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Asp Xaa Ser Cys Xaa Val Lys Val Lys Asp Phe Gln Cys Xaa Gly Ala
Ser Xaa Xaa Asn
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att tac ctg tgt ctt gct ttt gtt ctg ctc ctg gct tct acc ata gtt Ile Tyr Leu Cys Leu Ala Phe Val Leu Leu Ala Ser Thr Ile Val 5 10 15	166
gat toa ggg oft oft gat aaa aft gag act afa aga aac tgg aaa ogc Asp Ser Gly Leu Leu Asp Lys Ile Glu Thr Ile Arg Asn Trp Lys Arg 20 25 30	214
gat gac agc tat tgt gat gga tgc cta tgc acc ata tta aaa aaa gag Asp Asp Ser Tyr Cys Asp Gly Cys Leu Cys Thr Ile Leu Lys Lys Glu 35 40 45 50	262
act tgc aca tcg act atg agc tgc agg gga aca tgc cga aaa gag tgg Thr Cys Thr Ser Thr Met Ser Cys Arg Gly Thr Cys Arg Lys Glu Trp $55 \hspace{1.5cm} 60 \hspace{1.5cm} 65$	310
cca tgt tgg gaa gaa gac tgc tac tgt act gaa atc caa ggt gga gct Pro Cys Trp Glu Glu Asp Cys Tyr Cys Thr Glu Ile Gln Gly Gly Ala $70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$	358
tgc gtc aca ccc tca gaa tgc aaa cct gga gag tgttgaggat tggagtggcc Cys Val Thr Pro Ser Glu Cys Lys Pro Gly Glu $$85\ $	411
agttccagca catacagcac catggtgccc tggacaatcg tctattgaat tgaatatgcc	471
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<pre><211> 93 </pre> <pre><212> PRT <213> Conus geographus</pre> <pre><400> 123 Met Lys</pre>	

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-Glu; Xaa at residues 33, 52 and 57 is Pro or hydroxy-Pro; Xaa at
       residues 32 and 35 is Trp (D or L) or bromo-Trp (D or L);
<220>
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<222> (1)..(60)
      Xaa at residues 4 and 40 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo
       -Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 124
Asp Asp Ser Xaa Cys Asp Gly Cys Leu Cys Thr Ile Leu Lys Lys Xaa
Thr Cys Thr Ser Thr Met Ser Cys Arg Gly Thr Cys Arg Lys Xaa Xaa
Xaa Cys Xaa Xaa Xaa Asp Cys Xaa Cys Thr Xaa Ile Gln Gly Gly Ala
Cys Val Thr Xaa Ser Xaa Cys Lys Xaa Gly Xaa Cys
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<211>
      409
<212>
      DNA
<213> Conus geographus
<220>
<221> CDS
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<400> 125
aacgttgacg ggcagt atg aac att tac ctg tgt ctt gct ttt ctt ctg ttc
                  Met Asn Ile Tyr Leu Cys Leu Ala Phe Leu Leu Phe
ctg cct tct acc ata gtt gat tca ggg ctt ctt gat aaa att gag aca
                                                                      100
Leu Pro Ser Thr Ile Val Asp Ser Gly Leu Leu Asp Lys Ile Glu Thr
ata agg aat tgg aga cgt gat gaa agc aag tgt gat cga tgc aat tgc
                                                                      148
Ile Arg Asn Trp Arg Arg Asp Glu Ser Lys Cys Asp Arg Cys Asn Cys
    30
gee gaa tta aga tea tee aga tge aca caa get ate tte tge ett aca
                                                                     196
Ala Glu Leu Arg Ser Ser Arg Cys Thr Gln Ala Ile Phe Cys Leu Thr
ccg gag tta tgc aca ccg agc atc tca tgt ccg aca ggt gaa tgc cgc
Pro Glu Leu Cys Thr Pro Ser Ile Ser Cys Pro Thr Gly Glu Cys Arg
tgt act aag ttc cat cag tca aga tgc act aga ttc gta gaa tgc gta
                                                                      292
Cys Thr Lys Phe His Gln Ser Arg Cys Thr Arg Phe Val Glu Cys Val
cct aat aag tgt aga gac gca tagaggccag ttccagcaca tacagcacca
                                                                      343
Pro Asn Lys Cys Arg Asp Ala
tgatgccctg gacaatcgtg ttgttggatt gaatatgccc gtggcaggaa tctgtcctac
222222
                                                                      409
<210> 126
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Met Asn Ile Tyr Leu Cys Leu Ala Phe Leu Leu Phe Leu Pro Ser Thr
Ile Val Asp Ser Gly Leu Leu Asp Lys Ile Glu Thr Ile Arg Asn Trp
Arg Arg Asp Glu Ser Lys Cys Asp Arg Cys Asn Cys Ala Glu Leu Arg
Ser Ser Arg Cys Thr Gln Ala Ile Phe Cys Leu Thr Pro Glu Leu Cys
Thr Pro Ser Ile Ser Cys Pro Thr Gly Glu Cys Arg Cys Thr Lys Phe
His Gln Ser Arg Cys Thr Arg Phe Val Glu Cys Val Pro Asn Lys Cys
Arg Asp Ala
<210> 127
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       65
<212>
      PRT
<213> Conus geographus
<220>
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       PEPTIDE
       (1)..(65)
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<223>
       Xaa at residues 2, 12, 28, 40 and 56 is Glu or gamma-carboxy-Glu;
        Xaa at residues 27, 32, 37 and 59 is Pro or hydroxy-Pro
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Asp Xaa Ser Lys Cys Asp Arg Cys Asn Cys Ala Xaa Leu Arg Ser Ser
1 10 15
Arg Cys Thr Gln Ala Ile Phe Cys Leu Thr Xaa Xaa Leu Cys Thr Xaa
Ser Ile Ser Cys Xaa Thr Gly Xaa Cys Arg Cys Thr Lys Phe His Gln
Ser Arg Cys Thr Arg Phe Val Xaa Cys Val Xaa Asn Lys Cys Arg Asp
Ala
65
<210>
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      Conus geographus
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<223>
       Xaa at residues 9 and 23 is Glu or gamma-carboxy-Glu; Xaa at resi
       due 28 is Pro or hydroxy-Pro; Xaa at residue 15 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 128
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Lys Phe Leu Ser Gly Gly Phe Lys Xaa Ile Val Cys His Arg Xaa Cys

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1
                                     10
                                                         15
Ala Lys Gly Ile Ala Lys Xaa Phe Cys Asn Cys Xaa Asp
<210> 129
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<212> PRT
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<220>
<221>
       PEPTIDE
<222>
       (1) .. (7)
<223> Xaa at residue 1 is Gln or pyro-Gln; Xaa at residue 6 is Trp (D o
       r L) or bromo-Trp (D or L)
<400> 129
Xaa Cys Gly Gln Ala Xaa Cys
<210> 130
<211>
       524
<212> DNA
<213> Conus imperialis
<220>
<221> CDS
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                                                                       48
       Met His Leu Ser Leu Ala Ser Ser Ala Ala Leu Met Leu Leu
ctg ctt ttt gcc ttg ggc aac ttc gtt ggg gtc cag cca gga caa ata
                                                                       96
Leu Leu Phe Ala Leu Gly Asn Phe Val Gly Val Gln Pro Gly Gln Ile
                                         2.5
aga gat ctg aac aaa gga cag ctc aag gac aac cgc cgt aac ctq caa
                                                                      144
Arg Asp Leu Asn Lys Gly Gln Leu Lys Asp Asn Arg Arg Asn Leu Gln
tog cag agg aaa caa atg agt ctc ctc aag tca ctt cat gat cga aat
                                                                      192
Ser Gln Arg Lys Gln Met Ser Leu Leu Lys Ser Leu His Asp Arg Asn
             50
ggg tgt aac ggc aac acg tgt tcc aat agc ccc tgc cct aac aac tgt
                                                                      240
Gly Cys Asn Gly Asn Thr Cys Ser Asn Ser Pro Cys Pro Asn Asn Cys
tat tgc gat act gag gac gac tgc cac cct gac agg cgt gaa cat
                                                                      285
Tyr Cys Asp Thr Glu Asp Asp Cys His Pro Asp Arg Arg Glu His
tagagattag agagttteet tgteaacatg atgtegeace acacetetge tetgeagtgt
                                                                      345
gtacatcgac cagtcgacgc atctgttatt tctttgtctg ttggattgta catcgaccag
                                                                       405
tecaegeate tgttatttet ttgtetgttt gatttgtttt egtgtgttea taacaegeag
                                                                      465
agcettecta ttatetgtat tgcaatacae tttgcetgat aaccagaaag teeagtget
                                                                      524
<210>
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<211>
       93
<212> PRT
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Met His Leu Ser Leu Ala Ser Ser Ala Ala Leu Met Leu Leu Leu Leu
Phe Ala Leu Gly Asn Phe Val Gly Val Gln Pro Gly Gln Ile Arg Asp
Leu Asn Lys Gly Gln Leu Lys Asp Asn Arg Arg Asn Leu Gln Ser Gln
Arg Lys Gln Met Ser Leu Lys Ser Leu His Asp Arg Asn Gly Cys
Asn Gly Asn Thr Cys Ser Asn Ser Pro Cys Pro Asn Asn Cys Tyr Cys
Asp Thr Glu Asp Asp Cys His Pro Asp Arg Arg Glu His
<210>
       132
<211> 32
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<213> Conus imperialis
<220>
<221>
       PEPTIDE
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       (1)..(32)
<223>
       Xaa at residues 22 and 31 is Glu or gamma-carboxy-Glu; Xaa at res
       idues 13, 14 and 27 is Pro or hydroxy-Pro; Xaa at residue 18 is T
       yr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phosp
       ho-Tvr
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Asn Gly Cys Asn Gly Asn Thr Cys Ser Asn Ser Xaa Cys Xaa Asn Asn
Cys Xaa Cys Asp Thr Xaa Asp Asp Cys His Xaa Asp Arg Arg Xaa His
      133
<210>
<211>
       350
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<220>
<221> CDS
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                                                                         48
ctg gca tcc agc cag cag gaa gga gat gtc cag gca agg aaa aca cac
                                                                         96
Leu Ala Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
ccg aag aga gag ttc cat cgt att ctg cta agg cct gac aga cag tcc
                                                                        144
Pro Lys Arg Glu Phe His Arg Ile Leu Leu Arg Pro Asp Arg Gln Ser
gaa acg get tgt agg teg ete gga age tac caa tgt atg ggt aaa tge
                                                                        192
Glu Thr Ala Cys Arg Ser Leu Gly Ser Tyr Gln Cys Met Gly Lys Cys
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55

50

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caa ctc ggg gtt cat tcc tgg tgt gaa tgc att tat aac cga ggt agt
                                                                     240
Gln Leu Gly Val His Ser Trp Cys Glu Cys Ile Tyr Asn Arg Gly Ser
cag aag tot gga tgc gcg tgt agg tgt caa aag tgattaattg actcatttaa
                                                                      293
Gln Lys Ser Gly Cys Ala Cys Arg Cys Gln Lys
ctcgttgaac gatttaaaaa atccagagca atatgttcga gaaaaaccga agacqac
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      91
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      PRT
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Leu Ala Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
Pro Lys Arg Glu Phe His Arg Ile Leu Leu Arg Pro Asp Arg Gln Ser
Glu Thr Ala Cys Arg Ser Leu Gly Ser Tyr Gln Cys Met Gly Lys Cys
Gln Leu Gly Val His Ser Trp Cys Glu Cys Ile Tyr Asn Arg Gly Ser
Gln Lys Ser Gly Cys Ala Cys Arg Cys Gln Lys
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<211>
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<212>
       PRT
<213>
      Conus lacterculatus
<220>
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<221>
<222>
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       Glu or gamma-carboxy-Glu; Xaa at residue 25 is Trp (D or L) or br
       omo-Trp (D or L); Xaa at residues 12 and 30 is Tyr, 125I-Tyr, mon
       o-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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Xaa Ser Xaa Thr Ala Cys Arg Ser Leu Gly Ser Xaa Gln Cys Met Gly
Lys Cys Gln Leu Gly Val His Ser Xaa Cys Xaa Cys Ile Xaa Asn Arg
Gly Ser Gln Lys Ser Gly Cys Ala Cys Arg Cys Gln Lys
<210>
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      DNA
<213> Conus lividus
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        Met Lys Leu Thr Cys Val Val Ile Ile Ala Val Leu Phe Leu
acg gcc agt cag etc att aca gct gat tac tec aga gat aag cag gag
                                                                              96
Thr Ala Ser Gln Leu Ile Thr Ala Asp Tyr Ser Arg Asp Lys Gln Glu
tat cgt gca gag agg ctg aga gac gca atg ggg aaa ttc aaa ggt tcc
                                                                             144
Tyr Arg Ala Glu Arg Leu Arg Asp Ala Met Gly Lys Phe Lys Gly Ser
agg tcg tgc gga cat agt ggt gca ggt tgt tat act cgc cct tgc tgc
Arg Ser Cys Gly His Ser Gly Ala Gly Cys Tyr Thr Arg Pro Cys Cys
                                                                             192
cct ggt ctg cat tgc tct ggc ggc caa gct gga ggc ctg tgc gtg
Pro Gly Leu His Cys Ser Gly Gly Gln Ala Gly Gly Leu Cys Val
                                                                             237
taatagtaat aatotggogt otgatattto cagtotgtgo totaccotot tttgcotgag
tcatccatac ctgtgctcga g
                                                                             318
<210>
       137
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<213> Conus lividus
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Met Lys Leu Thr Cys Val Val Ile Ile Ala Val Leu Phe Leu Thr Ala
Ser Gln Leu Ile Thr Ala Asp Tyr Ser Arg Asp Lys Gln Glu Tyr Arg
Ala Glu Arg Leu Arg Asp Ala Met Gly Lys Phe Lys Gly Ser Arg Ser
Cys Gly His Ser Gly Ala Gly Cys Tyr Thr Arg Pro Cys Cys Pro Gly
Leu His Cys Ser Gly Gly Gln Ala Gly Gly Leu Cys Val
<210> 138
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<212>
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        (1)..(30)
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        0 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O
        -phospho-Ty
<400> 138
Ser Cys Gly His Ser Gly Ala Gly Cys Xaa Thr Arg Xaa Cys Cys Xaa
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Gly Leu His Cys Ser Gly Gly Gln Ala Gly Gly Leu Cys Val

								5.	,							
		20					25					30				
<211> <212>	139 312 DNA Conu	s liv	vidus	5												
	CDS	. (252	2)													
ggatcc	139 atg a Met 1	aaa (Lys 1	ctg a Leu :	Thr (tgt q Cys 1	gtg q Val V	gtg : /al :	atc a	[le :	tcc (Ser 1	gtg (Val 1	ctg t Leu 1	ttc o	ctg Leu	4	8
acg gcc Thr Ala 15	agt Ser	gag Glu	ttc Phe	ctt Leu 20	aca Thr	gct Ala	gat Asp	tac Tyr	tcc Ser 25	aga Arg	gat Asp	aag Lys	cgg Arg	cag Gln 30	9	6
tac cgt Tyr Arg	gct Ala	gtg Val	agg Arg 35	ttg Leu	aga Arg	gac Asp	gca Ala	atg Met 40	egg Arg	aat Asn	ttc Phe	aaa Lys	ggt Gly 45	acc Thr	14	4
agg gac Arg Asp	tgc Cys	ggg Gly 50	gaa Glu	tca Ser	ggt Gly	caa Gln	ggt Gly 55	tgc Cys	tat Tyr	agt Ser	gta Val	cgt Arg 60	cct Pro	tgc Cys	19	2
tgc cct Cys Pro	ggt Gly 65	ctg Leu	att Ile	tgc Cys	aaa Lys	ggc Gly 70	acc Thr	ggt Gly	ggt Gly	gga Gly	ggc Gly 75	ctg Leu	tgc Cys	cgg Arg	24	0
ccc tct Pro Ser 80	ggc Gly	atc Ile	tgai	tate	ee (cete	gtg	et e	cacc	eteti	t tt	geet	gagt		29	2
catecat	acc 1	tgtg	ctoga	ag											31	2
<211> <212>	140 82 PRT Conu	s liv	vidus	3												
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Ser Glu	Phe	Leu 20	Thr	Ala	Asp	Tyr	Ser 25	Arg	Asp	Lys	Arg	Gln 30	Tyr	Arg		
Ala Val	Arg 35	Leu	Arg	Asp	Ala	Met 40	Arg	Asn	Phe	Lys	Gly 45	Thr	Arg	Asp		
Cys Gly 50	Glu	Ser	Gly	Gln	Gly 55	Cys	Tyr	Ser	Val	Arg 60	Pro	Cys	Cys	Pro		
Gly Leu 65	Ile	Cys	Lys	Gly 70	Thr	Gly	Gly	Gly	Gly 75	Leu	Cys	Arg	Pro	Ser 80		
Gly Ile																
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       (1)..(35)
       Xaa at residue 4 is Glu or gamma-carboxy-Glu; Xaa at residues 14,
<223>
        17 and 32 is Pro or hydroxy-Pro; Xaa at residue 10 is Tyr, 125I-
       Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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Asp Cys Gly Xaa Ser Gly Gln Gly Cys Xaa Ser Val Arg Xaa Cys Cys
Xaa Gly Leu Ile Cys Lys Gly Thr Gly Gly Gly Leu Cys Arg Xaa
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Ser Gly Ile
        35
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Pro or hydroxy-Pro; Xaa at residue 2 is Tyr, 125I-Tyr, mono-iodo
       -Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 142
Val Xaa Xaa Thr His Xaa
<210> 143
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       -Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 143
Arg Xaa Lys Asn Ser Xaa
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<211> 7
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      (1)..(7)
       Xaa at residue 2 is Pro or hydroxy-Pro; Xaa at residue 6 is Trp (
       D or L) or bromo-Trp (D or L)
<400> 144
Ala Arg Xaa Lys Asn Ser Xaa
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       (1)..(6)
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<223>
       D or L) or bromo-Trp (D or L)
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Arg Xaa Lys Asn Ser Xaa
                 5
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       360
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       Conus miles
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Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Phe Leu
                                                                        48
acg gcc tgt caa ctc att act gct gcg aat tac gcc aga gat gaa cag
                                                                         96
Thr Ala Cys Gln Leu Ile Thr Ala Ala Asn Tyr Ala Arg Asp Glu Gln
                     20
gag tac ecc get gtg agg teg age gac gtg atg eag gat tee gaa gae
Glu Tyr Pro Ala Val Arg Ser Ser Asp Val Met Gln Asp Ser Glu Asp
                 35
ttg acg ttg acc aag aaa tgc acg gac gat tct cag ttc tgt aac cct
                                                                        192
Leu Thr Leu Thr Lys Lys Cys Thr Asp Asp Ser Gln Phe Cys Asn Pro
tog aat cat gac tgc tgc agt ggg aag tgt atc gac gaa gga gac aac
                                                                        240
Ser Asn His Asp Cys Cys Ser Gly Lys Cys Ile Asp Glu Gly Asp Asn
ggc ata tgc gct ata gtc cct gaa aac tct taacaatgta tactgacatt
                                                                        290
Gly Ile Cys Ala Ile Val Pro Glu Asn Ser
                         85
tececetetg tgeteegeeg teegtggeet gaetegteea teettgggeg tggteatgaa
ccgctcggtt
                                                                        360
<210> 147
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Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Phe Leu Thr Ala
Cys Gln Leu Ile Thr Ala Ala Asn Tyr Ala Arg Asp Glu Gln Glu Tyr
             20
                                  25
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80

85

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Pro Ala Val Arg Ser Ser Asp Val Met Gln Asp Ser Glu Asp Leu Thr
Leu Thr Lys Lys Cys Thr Asp Asp Ser Gln Phe Cys Asn Pro Ser Asn
His Asp Cys Cys Ser Gly Lys Cys Ile Asp Glu Gly Asp Asn Gly Ile
Cvs Ala Ile Val Pro Glu Asn Ser
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       Xaa at residues 23 and 34 is Glu or gamma-carboxy-Glu; Xaa at res
       idues 10 and 33 is Pro or hydroxy-Pro
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Ser Gly Lys Cys Ile Asp Xaa Gly Asp Asn Gly Ile Cys Ala Ile Val
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        35
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                                                                         48
acg gcc tgt caa ctc att act gct gcg aat tac gcc aga gat gaa cag
                                                                         96
Thr Ala Cys Gln Leu Ile Thr Ala Ala Asn Tyr Ala Arg Asp Glu Gln
1.5
gag tac cct gct gtg agg tcg agc gac gtg atg cag gat tcc gaa gac
                                                                        144
Glu Tyr Pro Ála Val Arg Ser Ser Ásp Val Met Gln Ásp Ser Glu Ásp
ctg acg ttg acc aag aaa tgc acg gag gat tct cag ttc tgt aac cct
                                                                         192
Leu Thr Leu Thr Lys Lys Cys Thr Glu Asp Ser Gln Phe Cys Asn Pro
tog aat cat gac tgc tgc agt ggg aag tgt atc gac gaa gga gac aac
                                                                         240
Ser Asn His Asp Cys Cys Ser Gly Lys Cys Ile Asp Glu Gly Asp Asn
ggc ata tgc gct ata gtc cct gaa aac tct taacaatgta tactgacatt
Gly Ile Cys Ala Ile Val Pro Glu Asn Ser
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tececetetg tgetecgeeg teegtggeet gaetegteea teettgggeg tggteatgaa	350												
ccgctcg	357												
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Cys Gln Leu Ile Thr Ala Ala Asn Tyr Ala Arg Asp Glu Gln Glu Tyr $20 \hspace{0.2in} 25 \hspace{0.2in} 30 \hspace{0.2in}$													
Pro Ala Val Arg Ser Ser Asp Val Met Gln Asp Ser Glu Asp Leu Thr · 35 40 45													
Leu Thr Lys Lys Cys Thr Glu Asp Ser Gln Phe Cys Asn Pro Ser Asn $50 \\ 0 \\ 0 \\ 0$													
His Asp Cys Cys Ser Gly Lys Cys Ile Asp Glu Gly Asp Asn Gly Ile 65 70 80													
Cys Ala Ile Val Pro Glu Asn Ser 85													
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<220> <221> PEPTIDE <222> (1)(36) <222> Xaa at residues 3, 23 and 34 is Glu or gamma-carboxy-Glu; Xaa residues 10 and 33 is Pro or hydroxy-Pro	at												
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Ser Gly Lys Cys Ile Asp Xaa Gly Asp Asn Gly Ile Cys Ala Ile Val $20 \\ 25 \\ 30$													
Xaa Xaa Asn Ser 35													
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gcc tgt caa ctc act aca gct gtg act tcc tcc aga ggt caa cag aag	98												

Ala C		Leu	Thr	Thr	Ala 20	Val	Thr	Ser	Ser	Arg 25	Gly	G1n	Gln	Lys	
cat·co	gt gct rg Ala	ctg Leu	agg Arg	tca Ser 35	act	gac Asp	aaa Lys	aac Asn	tcc Ser 40	agg Arg	atg Met	acc Thr	aag Lys	cgt Arg 45	146
tgc ac Cys Th	og cet hr Pro	cca Pro	ggt Gly 50	gga Gly	ctc Leu	tgt Cys	tac Tyr	cat His 55	gct Ala	tat Tyr	ccc Pro	tgc Cys	tgc Cys 60	agc Ser	194
aag ad Lys Th	et tgo hr Cys	aat Asn 65	ctc Leu	gat Asp	acc Thr	agc Ser	caa Gln 70	tgt Cys	gag Glu	cct Pro	agg Arg	tgg Trp 75	tca Ser		239
tgaaco	cactc	aata	ccct	et co	ctct	ggagg	g ctt	caga	agga	acta	acatt	ga a	aataa	aaaccg	299
cattgcaacg aaaaaaaaa aaaaaaaa 3														327	
<210> 153 <211> 76 <212> PRT <213> Conus miliaris															
<400> Leu Th 1	153 nr Cys	Val	Val	Ile	Ile	Ala	Val	Leu 10	Phe	Leu	Thr	Ala	Cys 15	Gln	
Leu Th	nr Thr	Ala 20	Val	Thr	Ser	Ser	Arg 25	Gly	Gln	Gln	Lys	His 30	Arg	Ala	
Leu Ai	rg Ser 35	Thr	Asp	Lys	Asn	Ser 40	Arg	Met	Thr	Lys	Arg 45	Cys	Thr	Pro	
Pro G		Leu	Cys	Tyr	His 55	Ala	Tyr	Pro	Cys	Cys 60	Ser	Lys	Thr	Cys	
Asn Le	eu Asp	Thr	Ser	Gln 70	Cys	Glu	Pro	Arg	Trp 75	Ser					
<210> <211> <212> <213>	154 31 PRT Conu	s mi	liar:	is											
<220> <221> <222> <223>	Xaa 4, or I	.(31 at r 13 a:) or	esid nd 2 bro	3 is no-Ti	Pro	or b	nydro L);	Xaa	Pro;	Xaa cesio	at :	resion 9 an	due :	t residue 30 is Trp 2 is Tyr, -phospho-	(D 125
<400> Cys T		Xaa	Gly 5	Gly	Leu	Cys	Xaa	His 10	Ala	Xaa	Xaa	Cys	Cys 15	Ser	
Lys T	hr Cys	Asn 20	Leu	Asp	Thr	Ser	Gln 25	Cys	Xaa	Xaa	Arg	Xaa 30	Ser		
<210> <211> <212> <213>	155 193 DNA Conu	s mo	nachi	ıs											

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<222> (28)..(162)
<400> 155
tgtgtgtgtg tggttctggg tccagca tct gat gtc agg aat gcc gca gtc cac
                                                                      54
                              Ser Asp Val Arg Asn Ala Ala Val His
                                                                     102
gaa aga cag aag gat ctg gtc gtt acg gcc acc acg act tgc tgt ggt
Glu Arg Gln Lys Asp Leu Val Val Thr Ala Thr Thr Thr Cys Cys Gly
tat aat eeg atg aca atg tge eet eet tge atg tge act aat ace tge
                                                                     150
Tyr Asn Pro Met Thr Met Cys Pro Pro Cys Met Cys Thr Asn Thr Cys 30 35 40
aaa aaa agt ggc tgatgctcca ggaccctctg aaccacgacg t
                                                                     193
Lys Lys Ser Gly
<210> 156
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<213> Conus monachus
<400> 156
Ser Asp Val Arg Asn Ala Ala Val His Glu Arg Gln Lys Asp Leu Val
Val Thr Ala Thr Thr Cys Cys Gly Tyr Asn Pro Met Thr Met Cys
Pro Pro Cys Met Cys Thr Asn Thr Cys Lys Lys Ser Gly
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<213> Conus monachus
<220>
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       (1)..(33)
<223> Xaa at residue 1 is Gln or pyro-Gln; Xaa at residues 17, 22 and 2
       3 is Pro or hydroxy-Pro; Xaa at residue 15 is Tyr, 125I-Tyr, mono
       -iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
<400> 157
Xaa Lys Asp Leu Val Val Thr Ala Thr Thr Thr Cys Cys Gly Xaa Asn
Xaa Met Thr Met Cys Xaa Xaa Cys Met Cys Thr Asn Thr Cys Lys Lys
Ser
<210> 158
      350
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<220>
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<222> (1)..(282)
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				cag Gln												96
ctg Leu	aag Lys	agc Ser 35	gac Asp	ttc Phe	tat Tyr	cgt Arg	gct Ala 40	ctg Leu	aga Arg	ggg Gly	tat Tyr	gac Asp 45	aga Arg	cag Gln	tgc Cys	144
				aat Asn												192
				gag Glu												240
				gga Gly 85												282
tgaa	atcat	ttt a	acto	cgtte	ga aa	agati	tttt	t aaa	aaato	ccag	agct	ata	tgt 1	tcga	gaaaaa	342
ccas	aaga	2														350
<210		159														
<21: <21: <21:	1> ! 2> !	94 PRT	s moi	nachi	ıs											
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Met 1	Met	Ser	Lys	Met 5	Gly	Ala	Met	Phe	Val 10	Leu	Leu	Leu	Leu	Phe 15	Thr	
Leu	Ala	Ser	Ser 20	Gln	Gln	Glu	Gly	Asp 25	Val	Gln	Ala	Arg	Lys 30	Thr	Ser	
Leu	Lys	Ser 35	Asp	Phe	Tyr	Arg	Ala 40	Leu	Arg	Gly	Tyr	Asp 45	Arg	Gln	Cys	
Thr	Leu 50	Val	Asn	Asn	Cys	Asp 55	Arg	Asn	Gly	Glu	Arg 60	Ala	Cys	Asn	Gly	
Asp 65	Cys	Ser	Cys	Glu	Gly 70	Gln	Ile	Cys	Lys	Cys 75	Gly	Tyr	Arg	Val	Ser 80	
Pro	Gly	Lys	Ser	Gly 85	Cys	Ala	Cys	Thr	Cys 90	Arg	Asn	Ala	Lys			
<21 <21 <21 <21	1> 2>	160 48 PRT Conu	s mo:	nach	us											
<22 <22 <22 <22	1> 2> 3>	Glu o; X	.(48 at r or aa a	esid gamm	a-ca sidu	rbox e 31	y-Gl is	u; X Tyr,	aa a 125	t re	sidu	e 35	is	Pro	13 and or hydro , di-iod	xy-Pr

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Xaa Cys Thr Leu Val Asn Asn Cys Asp Arg Asn Gly Xaa Arg Ala Cys
Asn Gly Asp Cys Ser Cys Xaa Gly Gln Ile Cys Lys Cys Gly Xaa Arg
Val Ser Xaa Gly Lys Ser Gly Cys Ala Cys Thr Cys Arg Asn Ala Lys
<210>
      161
<211> 211
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<220>
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                                                                       48
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
gca cct agc gtt gat gcc aaa gtt cat ctg aag acc aaa ggt gat ggg
                                                                       96
Ala Pro Ser Val Asp Ala Lys Val His Leu Lys Thr Lys Gly Asp Gly
            20
                                25
                                                                      1 4 4
ccc ctg tca tct ttc cga gat aat gca aag agt acc cta caa aga ctt
Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu
        35
                            40
cag gac aaa agc act tgc tgt ggc ttt aag atg tgt att cct tgt cgt
                                                                      192
Gln Asp Lys Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Pro Cys Arg
                                                                      211
taaccagcat gaaggatcc
<210> 162
<211> 64
<212> PRT
<213> Conus pennaceus
<400> 162
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Ala Pro Ser Val Asp Ala Lys Val His Leu Lys Thr Lys Gly Asp Gly
Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu
Gln Asp Lys Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Pro Cys Arg
<210> 163
<211> 13
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<213> Conus pennaceus
<220>
<221> PEPTIDE
<222> (1)..(13)
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<223> Xaa at residue 11 is Pro or hydroxy-Pro
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Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Xaa Cys Arg
<210> 164
<211> 450
<212> DNA
<213> Conus pennaceus
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Met Leu Leu Leu Phe Ala Leu Gly Ser Phe Val Val Val Gln Ser
gga cag ata aca aga gat gtg gac aat ggg cag ctc gcg gac aac cgc Gly Gln Ile Thr Arg Asp Val Asp Asn Gly Gln Leu Ala Asp Asn Arg
                                                                         96
cgt acc ctg cga tcg cag tgg aag caa gtg agt ttc ttc aag tca ctt
                                                                        144
Arg Thr Leu Arg Ser Gln Trp Lys Gln Val Ser Phe Phe Lys Ser Leu
gat aaa cga ctg act tgt aac gat cct tgc cag atg cat tcc gat tgc
                                                                        192
Asp Lys Arg Leu Thr Cys Asn Asp Pro Cys Gln Met His Ser Asp Cys
ggc ata tgt gaa tgc gtg gaa aat aaa tgc ata ttt ttc atg
                                                                        234
Gly Ile Cys Glu Cys Val Glu Asn Lys Cys Ile Phe Phe Met
taaacggatt gagtttgctt gtcaacacaa tgtcgcactg cagctcttct ctaccggtgg
                                                                        294
gtacatogac caaacgacgc atcttttatt totttgtotg tttcgtttgt totcctqtqt
                                                                        354
tcataacgta cagagecett taactaceet taetgetett caettaacet qataacetqa
                                                                        414
aggtccggtg cagctggcgt agccttcaca gtttcg
                                                                        450
<210> 165
<211> 78
<212> PRT
<213> Conus pennaceus
<400> 165
Met Leu Leu Leu Phe Ala Leu Gly Ser Phe Val Val Val Gln Ser
Gly Gln Ile Thr Arg Asp Val Asp Asn Gly Gln Leu Ala Asp Asn Arg
Arg Thr Leu Arg Ser Gln Trp Lys Gln Val Ser Phe Phe Lys Ser Leu
Asp Lys Arg Leu Thr Cys Asn Asp Pro Cys Gln Met His Ser Asp Cys
Gly Ile Cys Glu Cys Val Glu Asn Lys Cys Ile Phe Phe Met
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<210> 166
<211> 27
<212> PRT
<213> Conus pennaceus
<220>
<221> PEPTIDE
<222>
      (1)..(27)
<223> Xaa at residues 17 and 20 is Glu or gamma-carboxy-Glu; Xaa at res
       idue 6 is Pro or hydroxy-Pro
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Leu Thr Cys Asn Asp Xaa Cys Gln Met His Ser Asp Cys Gly Ile Cys
Xaa Cys Val Xaa Asn Lys Cys Ile Phe Phe Met
            20
<210> 167
<211>
       413
<212> DNA
<213> Conus pulicarius
<220>
<221> CDS
<222> (1)..(243)
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Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Phe Leu Thr Ala
                                                                       48
tgt caa etc agt aca get gat gac tec aga gat gag cag cag gat ect
                                                                       96
Cys Gln Leu Ser Thr Ala Asp Asp Ser Arg Asp Glu Gln Gln Asp Pro
ttg gtg agg tcg cat cgt gag gag cag aaa gcc gag gac ccc aag acg
                                                                      144
Leu Val Arg Ser His Arg Glu Glu Gln Lys Ala Glu Asp Pro Lys Thr
ged gag aga tgt tea gat tte gga tee gae tgt gtt eet get act eat
                                                                      192
Ala Glu Arg Cys Ser Asp Phe Gly Ser Asp Cys Val Pro Ala Thr His
    50
aac tgc tgc agt ggt gaa tgt ttt ggc ttc gag gac ttc ggc tta tgc
                                                                      240
Asn Cys Cys Ser Gly Glu Cys Phe Gly Phe Glu Asp Phe Gly Leu Cys
                     70
acg taaaactggt ctgacgtctg atattccccc ctctgtcctt catcctcttt
                                                                      293
Thr
tgcctgattc atccatacct atatgtgctc ctgaaccgct gtgtaccttt accctggtgg
                                                                      353
413
<210> 168
<211> 81
<212> PRT
<213> Conus pulicarius
<400> 168
Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Phe Leu Thr Ala
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Cys Gln Leu Ser Thr Ala Asp Asp Ser Arg Asp Glu Gln Gln Asp Pro
Leu Val Arg Ser His Arg Glu Glu Gln Lys Ala Glu Asp Pro Lys Thr
Ala Glu Arg Cys Ser Asp Phe Gly Ser Asp Cys Val Pro Ala Thr His
Asn Cys Cys Ser Gly Glu Cys Phe Gly Phe Glu Asp Phe Gly Leu Cys
                    70
Thr
<210> 169
      30
<211>
<212>
      PRT
<213> Conus pulicarius
<220>
<221> PEPTIDE
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      (1)..(30)
<223> Xaa at residues 19 and 24 is Glu or gamma-carboxy-Glu; Xaa at res
       idue 10 is Pro or hydroxy-Pro
<400> 169
Cys Ser Asp Phe Gly Ser Asp Cys Val Xaa Ala Thr His Asn Cys Cys
Ser Gly Xaa Cys Phe Gly Phe Xaa Asp Phe Gly Leu Cys Thr
                                25
<210> 170
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       375
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       DNA
<213> Conus purpurascens
<220>
<221> CDS
<222> (24)..(260)
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                                                                      53
                          Met Ser Arg Phe Gly Ile Met Val Leu Thr
ttt cta ctt ctt gtg tcc atg gca acc agc cat cgt tat gca aga ggg
                                                                     101
Phe Leu Leu Val Ser Met Ala Thr Ser His Arg Tyr Ala Arg Gly
aag cag gcg acg cga agg aac gca atc aac atc aga cgg aga agc aca
                                                                     149
Lys Gln Ala Thr Arg Arg Asn Ala Ile Asn Ile Arg Arg Arg Ser Thr
cca aaa act gag gcg tgc gaa gag gtc tgt gag ctg gaa gaa aag cac
                                                                     197
Pro Lys Thr Glu Ala Cys Glu Glu Val Cys Glu Leu Glu Glu Lys His
tgc tgc tgc ata aga agt gac gga ccc aaa tgt tcc cgt aag tgc ctg
                                                                     245
Cys Cys Cys Ile Arg Ser Asp Gly Pro Lys Cys Ser Arg Lys Cys Leu
ttg tca atc ttc tgt tagtttctgt acactgtctc attcattatc ttatcagtac
                                                                     300
Leu Ser Ile Phe Cys
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75 aagtgtaaac gagacatgtc agaaagtcga aggttgtgcg taatttgata agtattgttt gctgggatga acgga 375 <210> 171 <211> 79 <212> PRT <213> Conus purpurascens <400> 171 Met Ser Arg Phe Gly Ile Met Val Leu Thr Phe Leu Leu Val Ser Met Ala Thr Ser His Arg Tyr Ala Arg Gly Lys Gln Ala Thr Arg Arg Asn Ala Ile Asn Ile Arg Arg Ser Thr Pro Lys Thr Glu Ala Cys Glu Glu Val Cys Glu Leu Glu Glu Lys His Cys Cys Cys Ile Arg Ser Asp Gly Pro Lys Cys Ser Arg Lys Cys Leu Leu Ser Ile Phe Cys <210> 172 <211> 37 <212> PRT <213> Conus purpurascens <220> <221> PEPTIDE <222> (1)..(37) <223> Xaa at residues 4, 7, 8, 11, 13 and 14 is Glu or gamma-carboxy-Gl u; Xaa at residues 3 and 25 is Pro or hydroxy-Pr <400> 172 Xaa Lys Thr Xaa Ala Cys Xaa Xaa Val Cys Xaa Leu Xaa Xaa Lys His 10 Cys Cys Cys Ile Arg Ser Asp Gly Xaa Lys Cys Ser Arg Lys Cys Leu Leu Ser Ile Phe Cys 35 <210> 173 <211> 373 <212> DNA <213> Conus purpurascens <220> <221> CDS <222> (24)..(260) <400> 173 gacaggattg aacaaaattc agg atg tca gga ttg gga atc atg gtg cta acc 53 Met Ser Gly Leu Gly Ile Met Val Leu Thr ctt cta ctt ctt gtg tcc atg gca acc aac cat cag gat aga gga gag 101 Leu Leu Leu Val Ser Met Ala Thr Asn Hìs Gln Asp Arg Gly Glu

aag c Lys G	ag	gtg Val	acg Thr 30	caa Gln	agg Arg	gac Asp	gca Ala	atc Ile 35	aac Asn	gtc Val	aga Arg	cgg Arg	aga Arg 40	aga Arg	tca Ser	149
atc a	cc	cag Gln 45	caa Gln	gtc Val	gta Val	tct Ser	gag Glu 50	gag Glu	tgc Cys	aaa Lys	aag Lys	tac Tyr 55	tgt Cys	aag Lys	aaa Lys	197
cag a Gln A 6	sn	aag Lys	aat Asn	tgc Cys	tgc Cys	agc Ser 65	agt Ser	aaa Lys	cat His	gaa Glu	gaa Glu 70	ccc Pro	aga Arg	tgt Cys	gcc Ala	245
aag a Lys I 75					tagt	tte	igt a	acaco	ggtet	c at	tcat	tatt	: tta	atca	gtac	300
aagttaaacg agacctatca gaagtogaag gttgtgcata atttgataaa cattgtttgc														360		
tgggatgaac gga														373		
tgggatgaac gga 37 <210> 174 <211> 79 <212> PRT <213> Conus purpurascens																
<400> Met S 1		74 Gly	Leu	Gly 5	Ile	Met	Val	Leu	Thr 10	Leu	Leu	Leu	Leu	Val 15	Ser	
Met A	la	Thr	Asn 20	His	Gln	Asp	Arg	Gly 25	Glu	Lys	Gln	Val	Thr 30	Gln	Arg	
Asp A	la	Ile 35	Asn	Val	Arg	Arg	Arg 40	Arg	Ser	Ile	Thr	Gln 45	Gln	Val	Val	
Ser G	lu	Glu	Cys	Lys	Lys	Tyr 55	Cys	Lys	Lys	Gln	Asn 60	Lys	Asn	Cys	Cys	
Ser S		Lys	His	Glu	Glu 70		Arg	Cys	Ala	Lys 75		Cys	Phe	Gly		
<210> <211> <212> <213>	3 F	75 2 RT onus	s pui	pura	iscer	ıs										
<220> <221> <222> <223>	· (aa a	(32) at re	esidu ne 25	is	Pro	or h	nydro	oxy-1	Pro;	Xaa	at 1	resid	due !	oxy-Glu;) is Tyr,	125
<400> Val V		75 Ser	Xaa	Xaa 5	Cys	Lys	Lys	Xaa	Cys 10	Lys	Lys	Gln	Asn	Lys 15	Asn	
Cys C	ys	Ser	Ser 20	Lys	His	Xaa	Xaa	Xaa 25	Arg	Cys	Ala	Lys	Ile 30	Cys	Phe	
<210> <211> <212> <213>	2 F	76 4 RT Onus	s pui	rpura	ascer	ıs										
<220>																

<210> 179

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      (1)..(24)
<223> Xaa at residue 8 is Glu or gamma-carboxy-Glu; Xaa at residue 12 i
       s Pro or hydroxy-Pro; Xaa at residue 22 is Tyr, 125I-Tyr, mono-io
       do-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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Asp Cys Cys Gly Val Lys Leu Xaa Met Cys His Xaa Cys Leu Cys Asp
Asn Ser Cys Lys Asn Xaa Gly Lys
<210>
      177
<211> 235
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<213> Conus purpurascens
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                                                                          48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
ttc act tca gat cgt gca tcg gat gac agg aat acc aac gac aaa gca Phe Thr Ser Asp Arg Ala Ser Asp Asp Arg Asn Thr Asn Asp Lys Ala
                                                                          96
            20
tet ege etg etc tet eac gtt gtc agg gga tgc tgt ggt age tat eec
                                                                         144
Ser Arg Leu Leu Ser His Val Val Arg Gly Cys Cys Gly Ser Tyr Pro
        35
aat get gee tgt cat eet tge ggt tgt aaa gat agg eea teg tat tgt
                                                                         192
Asn Ala Ala Cys His Pro Cys Gly Cys Lys Asp Arg Pro Ser Tyr Cys
ggt caa gga cgc tgatgctcca ggaccetetg aaccacgacg t
                                                                         235
Gly Gln Gly Arg
<210> 178
<211>
      68
<212> PRT
<213> Conus purpurascens
<400> 178
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
Phe Thr Ser Asp Arg Ala Ser Asp Asp Arg Asn Thr Asn Asp Lys Ala
Ser Arg Leu Leu Ser His Val Val Arg Gly Cys Cys Gly Ser Tyr Pro
Asn Ala Ala Cys His Pro Cys Gly Cys Lys Asp Arg Pro Ser Tyr Cys
Gly Gln Gly Arg
65
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<211> 25
<212> PRT
<213> Conus purpurascens
<220>
<221> PEPTIDE
<222>
      (1)..(25)
<223> Xaa at residues 7, 13 and 20 is Pro or hydroxy-Pro; Xaa at residu
        es 6 and 22 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulph
        o-Tyr or O-phospho-Tyr
<400> 179
Gly Cys Cys Gly Ser Xaa Xaa Asn Ala Ala Cys His Xaa Cys Gly Cys
Lys Asp Arg Xaa Ser Xaa Cys Gly Gln
<210> 180
<211> 229
<212> DNA
<213> Conus purpurascens
<220>
<221> CDS
<222> (1)..(198)
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Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
                                                                             48
tte ace qta gat egt qca act gat ggc agg agt gct gca gec ata geq
                                                                              96
Phe Thr Val Asp Arg Ala Thr Asp Gly Arg Ser Ala Ala Ala Ile Ala
ttt gcc ctg atc gct ccg acc gtc cgg gaa gga tgc tgt tct aat cct
Phe Ala Leu Ile Ala Pro Thr Val Arg Glu Gly Cys Cys Ser Asn Pro
                                                                             144
gec tgt cat cet tge ggt tgt aaa gat agg cea teg tat tgt ggt caa
                                                                             192
Ala Cys His Pro Cys Gly Cys Lys Asp Arg Pro Ser Tyr Cys Gly Gln
                                                                             229
 gga cgc tgatgctcca ggaccctctg aaccacgacg t
Gly Arg
65
<210> 181
<211> 66
 <212> PRT
 <213> Conus purpurascens
 <400> 181
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 Phe Thr Val Asp Arg Ala Thr Asp Gly Arg Ser Ala Ala Ala Ile Ala
 Phe Ala Leu Ile Ala Pro Thr Val Arg Glu Gly Cys Cys Ser Asn Pro
 Ala Cys His Pro Cys Gly Cys Lys Asp Arg Pro Ser Tyr Cys Gly Gln
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Gly Arg
 <210> 182
 <211> 23
 <212> PRT
 <213> Conus purpurascens
 <220>
 <221> PEPTIDE
 <222>
        (1)..(23)
 <223> Xaa at residue 1 is Glu or gamma-carboxy-Glu; Xaa at residues 7,
        11 and 18 is Pro or hydroxy-Pro; Xaa at residue 20 is Tyr, 125I-T
        yr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
 <400> 182
 Xaa Gly Cys Cys Ser Asn Xaa Ala Cys His Xaa Cys Gly Cys Lys Asp
 Arg Xaa Ser Xaa Cys Gly Gln
<210> 183
<211> 334
 <212> DNA
<213> Conus purpurascens
<220>
<221> CDS
<222> (1)..(261)
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 atq atq tcq aaa atq qga qct atq ttt qtc ctt ttq ctt ctt ttc acc
 Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Leu Phe Thr
                                                                        96
 ctg gca tcc agc cag cag gaa gga gat gtc cag gca agg aaa aca cgc
 Leu Ala Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr Arg
 ctg acg agg gac ttc tat cgt act ctg cca gtg tct act aga gga tgc
                                                                       144
 Leu Thr Arg Asp Phe Tyr Arg Thr Leu Pro Val Ser Thr Arg Gly Cys
 age gge tee eet tgt ttt aaa aac aaa aeg tgt egg gat gaa tge ata
                                                                       192
 Ser Gly Ser Pro Cys Phe Lys Asn Lys Thr Cys Arg Asp Glu Cys Ile
 tgc ggc ggc tta tcc aat tgt tgg tgt ggc tac ggc ggt agt cga gga
                                                                       240
 Cys Gly Gly Leu Ser Asn Cys Trp Cys Gly Tyr Gly Gly Ser Arg Gly
 tgc aag tgt aca tgt aga gag tgattaatcg actctttaac tcgttgaatt
                                                                       291
 Cys Lys Cys Thr Cys Arg Glu
 atttaaaaaa tocagagcaa tatgttogag aaaaaccgaa gac
                                                                       334
 <210> 184
 <211> 87
 <212> PRT
 <213> Conus purpurascens
 <400> 184
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Leu Ala Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr Arg
Leu Thr Arg Asp Phe Tyr Arg Thr Leu Pro Val Ser Thr Arg Gly Cys
Ser Gly Ser Pro Cys Phe Lys Asn Lys Thr Cys Arg Asp Glu Cys Ile
50 55 60
Cys Gly Gly Leu Ser Asn Cys Trp Cys Gly Tyr Gly Gly Ser Arg Gly
Cys Lys Cys Thr Cys Arg Glu
                85
<210> 185
<211>
      41
<212>
       PRT
<213>
      Conus purpurascens
<220>
<221>
       PEPTIDE
<222>
       (1)..(41)
<223>
       Xaa at residue 16 is Glu or gamma-carboxy-Glu; Xaa at residue 6 i
       s Pro or hydroxy-Pro; Xaa at residue 26 is Trp (D or L) or bromo-
       Trp (D or L); Xaa at residue 29 is Tyr, 125I-Tyr, mono-iodo-Tyr,
       di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 185
Gly Cys Ser Gly Ser Xaa Cys Phe Lys Asn Lys Thr Cys Arg Asp Xaa
Cys Ile Cys Gly Gly Leu Ser Asn Cys Xaa Cys Gly Xaa Gly Gly Ser
Arg Gly Cys Lys Cys Thr Cys Arg Xaa
<210>
      186
<211>
       327
<212>
      DNA
<213> Conus purpurascens
<220>
<221> CDS
<222> (29)..(256)
<400> 186
cgacctcaag agggatcgat agcagttc atg atg tct aaa ctg gga gcc ttg
                                                                       52
                               Met Met Ser Lys Leu Gly Ala Leu
ttg acc atc tgt ctg ctt ctg ttt ccc att act gct ctt ctg atg gat
                                                                       100
Leu Thr Ile Cys Leu Leu Leu Phe Pro Ile Thr Ala Leu Leu Met Asp
gga gat caa cct gca gac cga cct gca gaa cgt atg gat tac gac att
                                                                       148
Gly Asp Gln Pro Ala Asp Arg Pro Ala Glu Arg Met Asp Tyr Asp Ile
25
                                         35
                     30
                                                             40
tca tct gag gtg cat cgt ttg ctt gaa agg aga cac ccg ccc tgt tgc
                                                                       196
Ser Ser Glu Val His Arg Leu Leu Glu Arg Arg His Pro Pro Cys Cys
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<400> 189

45 50 55 atg tac ggc aga tgc cgt cga tat ccc gga tgc tct agt gcc tct tgt 244 Met Tyr Gly Arg Cys Arg Arg Tyr Pro Gly Cys Ser Ser Ala Ser Cys tgc cag gga gga taacgtgttg atgaccaact ttgttacacg gctacgtcaa 296 Cys Gln Gly Gly gtgtctactg aataagtaaa acgattgcag t 327 <210> 187 <211> 76 <212> PRT <213> Conus purpurascens <400> 187 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe Pro Ile Thr Ala Leu Leu Met Asp Gly Asp Gln Pro Ala Asp Arg Pro Ala Glu Arg Met Asp Tyr Asp Ile Ser Ser Glu Val His Arg Leu Leu Glu Arg Arg His Pro Pro Cys Cys Met Tyr Gly Arg Cys Arg Arg Tyr Pro Gly Cys Ser Ser Ala Ser Cys Cys Gln Gly Gly 70 <210> 188 <211> 24 <212> PRT <213> Conus purpurascens <220> <221> PEPTIDE <222> (1)..(24) <223> Xaa at residues 2, 3 and 14 is Pro or hydroxy-Pro; Xaa at residue s 7 and 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho -Tyr or O-phospho-Tyr His Xaa Xaa Cys Cys Met Xaa Gly Arg Cys Arg Arg Xaa Xaa Gly Cys Ser Ser Ala Ser Cys Cys Gln Gly 20 <210> 189 <211> 24 <212> PRT <213> Conus purpurascens <220> <221> PEPTIDE <222> (1)..(24) <223> Xaa at residues 2, 3, 12 and 14 is Pro or hydroxy-Pro; Xaa at res idues 7 and 17 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-su lpho-Tyr or O-phospho-Tyr

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Xaa Asn Ala Leu Cys Cys Arg Lys
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<211> 400
<212> DNA
<213> Conus quercinus
<220>
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Met Lys Leu Thr Cys Val Val Ile Ile Ala Val Leu Phe Leu
aca gcc agt cag ctc gtt aca gct gat tac acc aga gat aaa tgg caa
                                                                        96
Thr Ala Ser Gln Leu Val Thr Ala Asp Tyr Thr Arg Asp Lys Trp Gln
15
tac cct gca gcg agt ttg aga ggc gga atg tgg aat ttg aga gat acc
                                                                       144
Tyr Pro Ala Ala Ser Leu Arg Gly Gly Met Trp Asn Leu Arg Asp Thr
agg gcg tgc tcg caa gta ggt gaa gct tgt ttt cct cag aaa cct tgc
                                                                       192
Arg Ala Cys Ser Gln Val Gly Glu Ala Cys Phe Pro Gln Lys Pro Cys
tgc cct gga ttc ctt tgc aat cac atc gga ggc atg tgc cac cac
                                                                       237
Cys Pro Gly Phe Leu Cys Asn His Ile Gly Gly Met Cys His His
tagtaacagt ctggcatctg atatttcccc tctgcgctcc accetettt ggctgattca
                                                                       297
teettaeetg tgtgtggtea tgaaceaete agtagetaea eetetggtgg etteagagga
                                                                       357
400
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<211> 77
<211> 77
<212> PRT
<213> Conus quercinus
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Met Lys Leu Thr Cys Val Val Ile Ile Ala Val Leu Phe Leu Thr Ala
Ser Gln Leu Val Thr Ala Asp Tyr Thr Arg Asp Lys Trp Gln Tyr Pro
Ala Ala Ser Leu Arg Gly Gly Met Trp Asn Leu Arg Asp Thr Arg Ala
Cys Ser Gln Val Gly Glu Ala Cys Phe Pro Gln Lys Pro Cys Cys Pro
Gly Phe Leu Cys Asn His Ile Gly Gly Met Cys His His
<210> 192
<211> 30
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<210> 195

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<212> PRT
<213> Conus guercinus
<220>
<221> PEPTIDE
<222>
       (1)..(30)
       Xaa at residue 7 is Glu or gamma-carboxy-Glu; Xaa at residues 11,
        14 and 17 is Pro or hydroxy-Pro
<400> 192
Ala Cys Ser Gln Val Gly Xaa Ala Cys Phe Xaa Gln Lys Xaa Cys Cys
Xaa Gly Phe Leu Cys Asn His Ile Gly Gly Met Cys His His
            20
<210> 193
<211> 11
<212> PRT
<213> Conus quercinus
<220>
<221> PEPTIDE
<222>
       (1)..(11)
<223> Xaa at residue 4 is Pro or hydroxy-Pro
<400> 193
Asp Cys Gln Xaa Cys Gly His Asn Val Cys Cys
<210> 194
<211> 336
<212> DNA
<213> Conus radiatus
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c atq aac tgt ctc gta ctg gct ttg gtt acc atc ggt ctt ctg gct gca
                                                                      49
  Met Asn Cys Leu Val Leu Ala Leu Val Thr Ile Gly Leu Leu Ala Ala
                                                                       97
aca acc gca gcc cct ctg gac acc acc acg gtc ctc ctc agc aca act
Thr Thr Ala Ala Pro Leu Asp Thr Thr Thr Val Leu Leu Ser Thr Thr
            20
aca ege gat gtc aag ggc tgt gtg tac gag ggc ata gag tac agt gtc
                                                                      145
Thr Arg Asp Val Lys Gly Cys Val Tyr Glu Gly Ile Glu Tyr Ser Val
        35
gga gag acc tac cag gca gac tgc aac acg tgt cgc tgt gat ggc ttt
                                                                      193
Gly Glu Thr Tyr Gln Ala Asp Cys Asn Thr Cys Arg Cys Asp Gly Phe
gac etg get aca tge ace gte geg gge tge aca gge ttt gga eee gag
                                                                      241
Asp Leu Ala Thr Cys Thr Val Ala Gly Cys Thr Gly Phe Gly Pro Glu
tgattggtac tattccacac ctagcaatgt tcacactgga accggaactt gatactacct
                                                                      301
                                                                      336
totaaatata atcaatttgt ttcaaaaggc ccaaa
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<213> Conus radiatus
<400> 195
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Thr Thr Ala Ala Pro Leu Asp Thr Thr Thr Val Leu Leu Ser Thr Thr
Thr Arg Asp Val Lys Gly Cys Val Tyr Glu Gly Ile Glu Tyr Ser Val
        35
Gly Glu Thr Tyr Gln Ala Asp Cys Asn Thr Cys Arg Cys Asp Gly Phe
Asp Leu Ala Thr Cys Thr Val Ala Gly Cys Thr Gly Phe Gly Pro Glu
<210> 196
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      43
<212> PRT
<213> Conus radiatus
<220>
<221>
      PEPTIDE
<222>
       (1)...(43)
<223> Xaa at residues 5, 8, 13 and 43 is Glu or gamma-carboxy-Glu; Xaa
       at residue 42 is Pro or hydroxy-Pro; Xaa at residues 4,9 and 15 i
       s Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-ph
       ospho-Tyr
<400> 196
Gly Cys Val Xaa Xaa Gly Ile Xaa Xaa Ser Val Gly Xaa Thr Xaa Gln
Ala Asp Cys Asn Thr Cys Arg Cys Asp Gly Phe Asp Leu Ala Thr Cys
Thr Val Ala Gly Cys Thr Gly Phe Gly Xaa Xaa
<210> 197
<211>
      536
<212> DNA
<213> Conus radiatus
<220>
<221>
      CDS
<222>
      (87)..(296)
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                                                                      60
ctggacagga ttcaacaaaa ttcagg atg tca gga ttg gga atc atg gtg cta
                                                                     113
                             Met Ser Gly Leu Gly Ile Met Val Leu
acc ctt cta ctt ctt gtg tcc atg gca acc agt cgt cag gat aga gga
                                                                     161
Thr Leu Leu Leu Val Ser Met Ala Thr Ser Arg Gln Asp Arg Gly
10
                    15
gtg gga cag ctg atg cca cgc gtc tcg ttc aaa gcc tgc aaa tca aat
                                                                     209
Val Gly Gln Leu Met Pro Arg Val Ser Phe Lys Ala Cys Lys Ser Asn
```

77	
30 35 40 tat gat tgc coc cag cgt ttc aaa tgc tgc agt tac acc tgg aat gga Tyr Asp Cys Pro Gln Arg Phe Lys Cys Cys Ser Tyr Thr Trp Asn Gly 45 55	257
toc agt gga tac tgt aaa cgt gtt tgc tat ctt tat cgt tagtgtaata Ser Ser Gly Tyr Cys Lys Arg Val Cys Tyr Leu Tyr Arg 70	306
cacaaagtga ctctgttcat tcctctccat catctcttta gaaacaacac ggtgtcgaga	366
togtttcttt gtgatgaaga gtagtatcac gggcagagtt cactagagat ctcaaatgaa	426
aaacaagatt atttagtaag ttggggaaaa tctggatctc gaaaagattc cttgaaaact	486
ccgtatttaa cacgcttgag agatgataat aaagaattct gaaagacaaa	536
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<pre><400> 198 Met Ser Gly Leu Gly Ile Met Val Leu Thr Leu Leu Leu Leu Val Ser 1 10 15</pre>	
Met Ala Thr Ser Arg Gln Asp Arg Gly Val Gly Gln Leu Met Pro Arg 20 25 30	
Val Ser Phe Lys Ala Cys Lys Ser Asn Tyr Asp Cys Pro Gln Arg Phe 35 40 45	
Lys Cys Cys Ser Tyr Thr Trp Asn Gly Ser Ser Gly Tyr Cys Lys Arg 50 60	
Val Cys Tyr Leu Tyr Arg 65 70	
<210> 199 <211> 34 <212> PRT <213> Conus radiatus	
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Xaa Thr Xaa Asn Gly Ser Ser Gly Xaa Cys Lys Arg Val Cys Xaa Leu 20 25 30	
Xaa Arg	
<210> 200 <211> 356 <212> DNA <213> Conus radiatus	

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Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Leu Phe Thr
ctg gca tee age cag cag gaa gga gat gte cag gca agg aaa aca cae
                                                                       96
Leu Ala Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
ccg aag aga gag ttc caa cgt att ctg cta agg tct ggc aga aag tgc
                                                                      144
Pro Lys Arg Glu Phe Gln Arg Ile Leu Leu Arg Ser Gly Arg Lys Cys
aat ttc gac aaa tgt aaa ggt acc gga gtc tac aat tgt ggg gaa tcc
                                                                      192
Asn Phe Asp Lys Cys Lys Gly Thr Gly Val Tyr Asn Cys Gly Glu Ser
tgc tca tgc gaa ggt ttg cac agt tgt cgc tgc act tat aac atc ggt
                                                                      240
Cys Ser Cys Glu Gly Leu His Ser Cys Arg Cys Thr Tyr Asn Ile Gly
tot atg aag tot gga tgc gcg tgt att tgt aca tac tat taatgattaa
                                                                      289
Ser Met Lys Ser Gly Cys Ala Cys Ile Cys Thr Tyr Tyr
ttgactcgtt taactcgttg aacgatttaa aaaatccaga gcaatatgtt cgagaaaaac
                                                                      349
cgaagac
                                                                      356
<210> 201
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       93
<212> PRT
<213> Conus radiatus
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Leu Ala Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr His
Pro Lys Arg Glu Phe Gln Arg Ile Leu Leu Arg Ser Gly Arg Lys Cys
Asn Phe Asp Lys Cys Lys Gly Thr Gly Val Tyr Asn Cys Gly Glu Ser
Cys Ser Cys Glu Gly Leu His Ser Cys Arg Cys Thr Tyr Asn Ile Gly
Ser Met Lys Ser Gly Cys Ala Cys Ile Cys Thr Tyr Tyr
<210> 202
<211> 47
<212> PRT
<213> Conus radiatus
<220>
<221> PEPTIDE
<222> (1)..(47)
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<223> Xaa at residues 17 and 22 is Glu or gamma-carboxy-Glu; Xaa at res
       idues 13, 31, 46 and 47 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-
       Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 202
Lys Cys Asn Phe Asp Lys Cys Lys Gly Thr Gly Val Xaa Asn Cys Gly
Xaa Ser Cys Ser Cys Xaa Gly Leu His Ser Cys Arg Cys Thr Xaa Asn
Ile Gly Ser Met Lys Ser Gly Cys Ala Cys Ile Cys Thr Xaa Xaa
<210> 203
<211> 338
<212> DNA
<213> Conus radiatus
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<221> CDS
<222> (1)..(264)
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Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Phe Thr
ctg gca tcc agg cag cag gaa gga gat gtc cag gca agg aaa aca cgc Leu Ala Ser Arg Gln Glu Glu Gly Asp Val Gln Ala Arg Lys Thr Arg
                                                                               96
ctg acg agc gac ttc tat agt gtt ctg caa agg tat gga cta gga tgc
                                                                              144
Leu Thr Ser Asp Phe Tyr Ser Val Leu Gln Arg Tyr Gly Leu Gly Cys
gct ggc act tgt ggt tca agc agc aat tgt gtt aga gat tat tgt gac Ala Gly Thr Cys Gly Ser Ser Ser Asn Cys Val Arg Asp Tyr Cys Asp
                                                                              192
tgc cca aaa ccc aat tgt tac tgc act ggc aaa ggc ttt cgt caa cca
                                                                              240
Cys Pro Lys Pro Asn Cys Tyr Cys Thr Gly Lys Gly Phe Arg Gln Pro
gga tgc ggg tgt tca tgt ttg ggg tgattaattg gctcttttaa ctcgttgaac Gly Cys Gly Cys Ser Cys Leu Gly
                                                                              294
gatttaaaaa atccagagca atatqttcga gaaaaaccga agac
                                                                              338
<210> 204
<211>
<212> PRT
<213> Conus radiatus
Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Leu Phe Thr
Leu Ala Ser Arg Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr Arg
Leu Thr Ser Asp Phe Tyr Ser Val Leu Gln Arg Tyr Gly Leu Gly Cys
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Ala Gly Thr Cys Gly Ser Ser Ser Asn Cys Val Arg Asp Tyr Cys Asp

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50
                        55
                                            60
Cys Pro Lys Pro Asn Cys Tyr Cys Thr Gly Lys Gly Phe Arg Gln Pro
Gly Cys Gly Cys Ser Cys Leu Gly
<210> 205
<211>
      44
<212>
      PRT
<213> Conus radiatus
<220>
<221> PEPTIDE
<222>
      (1)..(44)
<223> Xaa at residues 23, 25 and 37 is Pro or hydroxy-Pro; Xaa at resid
       ues 1, 19 and 28 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-
       sulpho-Tyr or O-phospho-Tyr
<400> 205
Xaa Gly Leu Gly Cys Ala Gly Thr Cys Gly Ser Ser Ser Asn Cys Val
Arg Asp Xaa Cys Asp Cys Xaa Lys Xaa Asn Cys Xaa Cys Thr Gly Lys
Glv Phe Arg Gln Xaa Glv Cvs Glv Cvs Ser Cvs Leu
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       375
<212>
      DNA
<213> Conus sponsalis
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gacaggattg aacaaaattc agg atg tca gga ttg gga atc atg gtg ctg acc
                                                                       53
                          Met Ser Gly Leu Gly Ile Met Val Leu Thr
                                                                      101
ctt ttg ctt ctt gtg tcc atg gca acc agc cat aag gat gga gga gag
Leu Leu Leu Leu Val Ser Met Ala Thr Ser His Lys Asp Gly Gly Glu
                15
                                                                      149
aag cag gcg atg caa agg gac gca atc aac gtc aga ctg aga aga tca
Lys Gln Ala Met Gln Arg Asp Ala Ile Asn Val Arg Leu Arg Arg Ser
             30
ctc act cgg aga gca gta act gag gcg tgc acg gag gac tgt aag act
                                                                      197
Leu Thr Arg Arg Ala Val Thr Glu Ala Cys Thr Glu Asp Cys Lys Thr
cag gac aag aag tgc tgc ggc gaa atg aat gga caa cac aca tgt gcc
                                                                      245
Gln Asp Lys Lys Cys Cys Gly Glu Met Asn Gly Gln His Thr Cys Ala
aag ata tgc ctc gga tagtctctgt acgctgtctc attcattatc tcatcagtac
                                                                      300
Lys Ile Cys Leu Gly
aagtgtaaac gagacaggtc agaaagtcga aggttgttcg aaatttgata agcattgttt
                                                                      360
```

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actgggacga acgga
                                                                      375
<210> 207
<211> 79
<212> PRT
<213> Conus sponsalis
<400> 207
Met Ser Gly Leu Gly Ile Met Val Leu Thr Leu Leu Leu Leu Val Ser
Met Ala Thr Ser His Lys Asp Gly Gly Glu Lys Gln Ala Met Gln Arg
Asp Ala Ile Asn Val Arg Leu Arg Arg Ser Leu Thr Arg Arg Ala Val
Thr Glu Ala Cys Thr Glu Asp Cys Lys Thr Gln Asp Lys Lys Cys
Gly Glu Met Asn Gly Gln His Thr Cys Ala Lys Ile Cys Leu Gly
<210> 208
<211> 32
<212> PRT
<213> Conus sponsalis
<220>
<221> PEPTIDE
<222> (1)..(32)
<223> Xaa at residues 4, 8 and 20 is Glu or gamma-carboxy-Glu
<400> 208
Ala Val Thr Xaa Ala Cys Thr Xaa Asp Cys Lys Thr Gln Asp Lys Lys
Cys Cys Gly Xaa Met Asn Gly Gln His Thr Cys Ala Lys Ile Cys Leu
<210> 209
<211>
<212> PRT
<213> Conus stercusmuscarum
<220>
<221> PEPTIDE
<222>
       (1)..(8)
<223> Xaa at residues 3 and 6 is Pro or hydroxy-Pro; Xaa at residue 4 i
       s D-Trp
<400> 209
Gly Cys Xaa Xaa Gln Xaa Val Cys
<210> 210
<211> 9
<212> PRT
<213> Conus striatus
<220>
<221> PEPTIDE
<222>
       (1)..(9)
<223> Xaa at residue 7 is Pro or hydroxy-Pro
```

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<400> 210
Cys Ile Ile Arg Asn Cys Xaa Arg Gly
<210> 211
<211> 238
<212> DNA
<213> Conus striatus
<220>
<221> CDS
<222> (4)..(96)
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    Ser Thr Arg Cys Leu Pro Asp Gly Thr Ser Cys Leu Phe Ser Arg
atc aga tgc tgc ggt act tgc agt tca atc tta aag tca tgt gtg agc Ile Arg Cys Cys Gly Thr Cys Ser Ser Ile Leu Lys Ser Cys Val Ser
                                                                            96
tgatccageg gttgatette etceetetgt getccateet tttetgeetg agtteteett
acctgagagt ggtcatgaac cactcatcac ctactcttct ggaggcttca gaggagctac
                                                                           216
                                                                           238
agtgaaataa aagccgcatt gc
<210> 212
<211> 31
<212> PRT
<213> Conus striatus
<400> 212
Ser Thr Arg Cys Leu Pro Asp Gly Thr Ser Cys Leu Phe Ser Arg Ile
Arg Cys Cys Gly Thr Cys Ser Ser Ile Leu Lys Ser Cys Val Ser
<210> 213
<211> 28
<212> PRT
<213> Conus striatus
<220>
<221> PEPTIDE
<222> (1)..(28)
<223> Xaa at residue 3 is Pro or hydroxy-Pro
<400> 213
Cys Leu Xaa Asp Gly Thr Ser Cys Leu Phe Ser Arg Ile Arg Cys Cys
Gly Thr Cys Ser Ser Ile Leu Lys Ser Cys Val Ser
<210> 214
<211> 707
 <212> DNA
<213> Conus striatus
<220>
<221> CDS
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<222> (171)..(539) <400> 214 eggettetaa tacqactcac tatagggcaa gcaqtqqtaa caacqcaqaq tacqcqgggg 60 gacggcagac cagctgggga ccagacagac gtcaaacagc atcgcagtca qqtqtqqaqa 120 tcccaagaca cccagaagaa ggagacagaa gagttatcgt tcgtaacaca atg gcc 176 atg aac atg tog atg aca oto tgc atg ttt gta atg gtc gtc gtg gca 224 Met Asn Met Ser Met Thr Leu Cys Met Phe Val Met Val Val Val Ala gcc act gtc att gat tcc act cag tta caa gaa cca gat ctc agt cgc 272 Ala Thr Val Ile Asp Ser Thr Gln Leu Gln Glu Pro Asp Leu Ser Arg atg cga cgc agc ggg cct gct gac tgt tgc agg atg aaa gag tgt tgc 320 Met Arg Arg Ser Gly Pro Ala Asp Cys Cys Arg Met Lys Glu Cys Cys acc gac aga gtg aac gag tgt cta cag cgc tat tct ggc cgg gaa gat 368 Thr Asp Arg Val Asn Glu Cys Leu Gln Arg Tyr Ser Gly Arg Glu Asp aaa ttc gtt tcg ttt tgt tat cag gag gcc aca gtc aca tgt gga tct Lys Phe Val Ser Phe Cys Tyr Gln Glu Ala Thr Val Thr Cys Gly Ser 416 ttt aac gaa atc gtg ggc tgt tgc tat gga tat caa atg tgc atg ata 464 Phe Asn Glu Ile Val Gly Cys Cys Tyr Gly Tyr Gln Met Cys Met Ile cga gtt gtg aaa ccg aac agt cta agt ggg gcc cat gag gcg tgc aaa 512 Arg Val Val Lys Pro Asn Ser Leu Ser Gly Ala His Glu Ala Cys Lys acc gtt tet tgt ggt aac cet tge get tgaggtgtee tegegeeacq 559 Thr Val Ser Cys Gly Asn Pro Cys Ala teacetgtgt acagegeegt caccagagee etgatettta tgecettate tgtetttttg 619 ctctttcact ctctgaagtc ttgaggtttg ttccattctt gtcaatcatc tcacgcqcat ccaagtaaat aaaggtgacg tgacaaac 707 <210> 215 <211> PRT <212> <213> Conus striatus <400> 215 Met Ala Met Asn Met Ser Met Thr Leu Cys Met Phe Val Met Val Val Val Ala Ala Thr Val Ile Asp Ser Thr Gln Leu Gln Glu Pro Asp Leu Ser Arg Met Arg Arg Ser Gly Pro Ala Asp Cys Cys Arg Met Lys Glu Cys Cys Thr Asp Arg Val Asn Glu Cys Leu Gln Arg Tyr Ser Gly Arg

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Glu Asp Lys Phe Val Ser Phe Cys Tyr Gln Glu Ala Thr Val Thr Cys
Gly Ser Phe Asn Glu Ile Val Gly Cys Cys Tyr Gly Tyr Gln Met Cys
Met Ile Arg Val Val Lys Pro Asn Ser Leu Ser Gly Ala His Glu Ala
Cys Lys Thr Val Ser Cys Gly Asn Pro Cys Ala
<210>
       216
<211>
      86
<212>
      PRT
<213> Conus striatus
<220>
<221> PEPTIDE
<222>
       (1)..(86)
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      Xaa at residues 11, 19, 28, 38, 48 and 74 is Glu or gamma-carboxy
       -Glu; Xaa at residues 3, 66 and 84 is Pro or hydroxy-Pro; Xaa at
       residues 24, 26, 54 and 56 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-io
       do-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 216
Ser Gly Xaa Ala Asp Cys Cys Arg Met Lys Xaa Cys Cys Thr Asp Arg
Val Asn Xaa Cys Leu Gln Arg Xaa Ser Gly Arg Xaa Asp Lys Phe Val
Ser Phe Cys Xaa Gln Xaa Ala Thr Val Thr Cys Gly Ser Phe Asn Xaa
Ile Val Gly Cys Cys Xaa Gly Xaa Gln Met Cys Met Ile Arg Val Val
Lys Xaa Asn Ser Leu Ser Gly Ala His Xaa Ala Cys Lys Thr Val Ser
Cys Gly Asn Xaa Cys Ala
<210> 217
<211> 14
<212> PRT
<213> Conus striatus
<220>
<221>
       PEPTIDE
<222>
       (1)..(14)
<223> Xaa at residues 1 and 3 is Trp (D or L) or bromo-Trp (D or L)
<400> 217
Xaa Ser Xaa Arg Met Gly Asn Gly Asp Arg Arg Ser Asp Gln
<210> 218
<211> 343
<212>
      DNA
<213> Conus striolatus
<220>
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Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Leu Thr
                                                                         4.8
ctg gca tcc agc cag cag gag gga gat gtc cag gca agg aaa aca agc
                                                                         96
Leu Ala Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr Ser
ctg aag agc gac ttc tat cgt gct ctg aga ccg tat gac aga cag tgc
                                                                         144
Leu Lys Ser Asp Phe Tyr Arg Ala Leu Arg Pro Tyr Asp Arg Gln Cys
act ttt gtc aac aat tgt caa cag aac ggt gcg tgt aac ggt gat tgc
                                                                        192
Thr Phe Val Asn Asn Cys Gln Gln Asn Gly Ala Cys Asn Gly Asp Cys
tot tgc ggg gac cag att tgt aaa tgc ggt tat aga atc agt cct ggg
                                                                         240
Ser Cys Gly Asp Gln Ile Cys Lys Cys Gly Tyr Arg Ile Ser Pro Gly
agg toa gga tgc gcg tgt act tgt aga aat gcc aaa tgaatcactt
                                                                        286
Arg Ser Gly Cys Ala Cys Thr Cys Arg Asn Ala Lys
aactcgttga aagattttta aaaatccaga gctatatgtt cgagaaaaac cgaagac
                                                                        343
<210> 219
<211> 92
<212> PRT
<213> Conus striolatus
<400> 219
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Leu Ala Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr Ser
Leu Lys Ser Asp Phe Tyr Arg Ala Leu Arg Pro Tyr Asp Arg Gln Cys
Thr Phe Val Asn Asn Cys Gln Gln Asn Gly Ala Cys Asn Gly Asp Cys
Ser Cys Gly Asp Gln Ile Cys Lys Cys Gly Tyr Arg Ile Ser Pro Gly
Arg Ser Gly Cys Ala Cys Thr Cys Arg Asn Ala Lys
<210> 220
<211>
       46
<212> PRT
      Conus striolatus
<220>
<221>
      PEPTIDE
<222>
       (1)..(46)
<223>
       Xaa at residue 1 is Gln or pyro-Gln; Xaa at residue 33 is Pro or
       hydroxy-Pro; Xaa at residue 29 is Tyr, 125I-Tyr, mono-iodo-Tyr, d
```

i-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

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<400> 220
Xaa Cys Thr Phe Val Asn Asn Cys Gln Gln Asn Gly Ala Cys Asn Gly
Asp Cys Ser Cys Gly Asp Gln Ile Cys Lys Cys Gly Xaa Arg Ile Ser
Xaa Gly Arg Ser Gly Cys Ala Cys Thr Cys Arg Asn Ala Lys
<210>
<211> 398
<212> DNA
<213> Conus tessulatus
<220>
<221> CDS
<222> (7)..(240)
<400> 221
ggatcc atg aaa ctg acg tgt gtg gtg atc atc gcc gtg ctg ttc ctg
Met Lys Leu Thr Cys Val Val Ile Ile Ala Val Leu Phe Leu
                                                                         48
acg gcc tgt caa ttc att ata gct gat ttc tcc aga gat aag cgg gta
                                                                         96
Thr Ala Cys Gln Phe Ile Ile Ala Asp Phe Ser Arg Asp Lys Arg Val
15
cat cgt gca gag agg ttg aga gac ata atg cag aat ttc aga ggt acc
                                                                        144
His Arg Ala Glu Arg Leu Arg Asp Ile Met Gln Asn Phe Arg Gly Thr
                 35
agg tog tgc gcg gaa ttt ggt gaa gtt tgt agt tct acc gct tgc tgc
                                                                        192
Arg Ser Cys Ala Glu Phe Gly Glu Val Cys Ser Ser Thr Ala Cys Cys
cct gat ttg gat tgc gtt gag gcc tat tca ccc atc tgt ctc tgg gaa
                                                                        240
Pro Asp Leu Asp Cys Val Glu Ala Tyr Ser Pro Ile Cys Leu Trp Glu
tagtctggca tctgatattt cccgtctgtg ctctacctac ttctgccgga ttcatccata
                                                                        300
cctatgtgtg gccatgaacc actcagtacc tacacctctg gtggcttcct agggacgtat
                                                                        360
atcaaaataa aaccacattg caaaaaaaaa aaaaaaaa
                                                                        398
<210> 222
<211>
       78
<212>
      PRT
<213> Conus tessulatus
<400> 222
Met Lys Leu Thr Cys Val Val Ile Ile Ala Val Leu Phe Leu Thr Ala
Cys Gln Phe Ile Ile Ala Asp Phe Ser Arg Asp Lys Arg Val His Arg
Ala Glu Arg Leu Arg Asp Ile Met Gln Asn Phe Arg Gly Thr Arg Ser
Cys Ala Glu Phe Gly Glu Val Cys Ser Ser Thr Ala Cys Cys Pro Asp
                                              60
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Leu Asp Cys Val Glu Ala Tyr Ser Pro Ile Cys Leu Trp Glu
                    70
<210> 223
<211>
      31
<212> PRT
<213> Conus tessulatus
<220>
<221>
       PEPTIDE
<222>
       (1)..(31)
<223> Xaa at residues 4, 7 and 22 is Glu or gamma-carboxy-Glu; Xaa at r
       esidues 16 and 26 is Pro or hydroxy-Pro; Xaa at residue 30 is Trp
        (D or L) or bromo-Trp (D or L); Xaa at residue 24 is Tyr, 125I-T
       yr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 223
Ser Cys Ala Xaa Phe Gly Xaa Val Cys Ser Ser Thr Ala Cys Cys Xaa
Asp Leu Asp Cys Val Xaa Ala Xaa Ser Xaa Ile Cys Leu Xaa Xaa
<210>
      224
      273
<211>
<212>
      DNA
<213> Conus textile
<400> 224
cgattgcagg ggttacgatg cgccgtgtag ctctggcgcg ccatgttgtg attggtggac
                                                                      60
atgttcagca cgaaccaacc gctgttttta ggctgaccac aagccatccg acatcaccac
tetectette agaggettea aggetttttg tteteetttt gaagaatett tacqaqtqaa
                                                                     180
caaacaagta gaatagcacg tttttccccc tttgaaaaat caataatgga ggttaaacaa
                                                                     240
aactgtcttc ttcaataaag attttatcat aat
                                                                     273
<210> 225
<211> 50
<212> PRT
<213> Conus textile
<400> 225
Ile Gln Gly Gly Asp Glu Arg Gln Lys Ala Lys Ile Asn Phe Leu
Ser Arg Ser Asp Arg Asp Cys Arg Gly Tyr Asp Ala Pro Cys Ser Ser
Gly Ala Pro Cys Cys Asp Trp Trp Thr Cys Ser Ala Arg Thr Asn Arg
Cys Phe
    50
<210> 226
<211> 29
<212> PRT
<213> Conus textile
<220>
<221> PEPTIDE
<222>
      (1)..(29)
<223> Xaa at residues 8 and 14 is Pro or hydroxy-Pro; Xaa at residues 1
```

<400> 229

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8 and 19 is Trp (D or L) or bromo-Trp (D or L); Xaa at residue 5
       is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-p
       hospho-Tyr
<400> 226
Asp Cys Arg Gly Xaa Asp Ala Xaa Cys Ser Ser Gly Ala Xaa Cys Cys
Asp Xaa Xaa Thr Cys Ser Ala Arg Thr Asn Arg Cys Phe
<210> 227
<211> 23
<212> PRT
<213> Conus textile
<220>
<221> PEPTIDE
<222>
       (1)..(23)
<223>
      Xaa at residue 16 is Glu or gamma-carboxy-Glu; Xaa at residues 3,
        11, 12, 22 and 23 is Pro or hydroxy-Pro; Xaa at residues 4, 5 an
       d 14 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr o
       r O-phospho-Tyr
<400> 227
Asn Cys Xaa Xaa Cys Val Val Xaa Cys Cys Xaa Xaa Ala Xaa Cys Xaa
Ala Ser Gly Cys Arg Xaa Xaa
<210> 228
<211>
      205
<212>
       DNA
<213> Conus textile
<220>
<221> CDS
<222> (1)..(186)
<400> 228
atg cac tgt ctc cca atc ttc gtc att ctt ctg ctg ctg act gca tct
                                                                      48
Met His Cys Leu Pro Ile Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
gga cet age gtt gat gee caa etg aag ace aaa gat gat gtg eee etg
                                                                      96
Gly Pro Ser Val Asp Ala Gln Leu Lys Thr Lys Asp Asp Val Pro Leu
tca tct ttc cga gat cat gca aag agt acc cta cga aga ctt cag gac
                                                                     144
Ser Ser Phe Arg Asp His Ala Lys Ser Thr Leu Arg Arg Leu Gln Asp
aaa cag act tgc tgt ggc tat agg atg tgt gtt cct tgt ggt
                                                                     186
Lys Gln Thr Cys Cys Gly Tyr Arg Met Cys Val Pro Cys Gly
taaccagcat gaaggatcc
                                                                     205
<210> 229
<211> 62
<212>
      PRT
<213> Conus textile
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Met His Cys Leu Pro Ile Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Gly Pro Ser Val Asp Ala Gln Leu Lys Thr Lys Asp Asp Val Pro Leu
Ser Ser Phe Arg Asp His Ala Lys Ser Thr Leu Arg Arg Leu Gln Asp
Lys Gln Thr Cys Cys Gly Tyr Arg Met Cys Val Pro Cys Gly
<210> 230
<211> 12
<212> PRT
<213> Conus textile
<220>
<221> PEPTIDE
<222>
       (1)..(12)
<223> Xaa at residue 1 is Gln or pyro-Gln; Xaa at residue 11 is Pro or
       hydroxy-Pro; Xaa at residue 6 is Tyr, 125I-Tyr, mono-iodo-Tyr, di
       -iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 230
Xaa Thr Cys Cys Gly Xaa Arg Met Cys Val Xaa Cys
<210>
     231
<211> 115
<212> DNA
<213> Conus textile
<220>
<221>
      CDS
<222> (2)..(94)
<400> 231
g tta tgg agc gat tgc tat agt tgg tta gga tca tgt att gcg ccc tcg
  Leu Trp Ser Asp Cys Tyr Ser Trp Leu Gly Ser Cys Ile Ala Pro Ser
cag tgt tgt tct gag gtt tgt gat tat tac tgc cgc cta tgg cga
                                                                      94
Gln Cys Cys Ser Glu Val Cys Asp Tyr Tyr Cys Arg Leu Trp Arg
tgaactcgga ccacaagcca t
                                                                     115
<210> 232
<211>
       31
<212> PRT
<213> Conus textile
<400> 232
Leu Trp Ser Asp Cys Tyr Ser Trp Leu Gly Ser Cys Ile Ala Pro Ser
Gln Cys Cys Ser Glu Val Cys Asp Tyr Tyr Cys Arg Leu Trp Arg
<210> 233
<211> 28
<212> PRT
<213> Conus textile
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<220>
<221> PEPTIDE
<222>
       (1)..(28)
<223> Xaa at residue 18 is Glu or gamma-carboxy-Glu; Xaa at residue 13
       is Pro or hydroxy-Pro; Xaa at residues 5 and 27 is Trp (D or L) or bromo-Trp (D or L); Xaa at residue 3, 22 and 23 is Tyr, 125I-Ty
       r, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 233
Asp Cys Xaa Ser Xaa Leu Gly Ser Cys Ile Ala Xaa Ser Gln Cys Cys
Ser Xaa Val Cys Asp Xaa Xaa Cys Arg Leu Xaa Arg
<210> 234
<211> 279
<212> DNA
<213> Conus textile
<220>
<221> CDS
<222> (7)..(126)
<400> 234
agetga ega atg aaa aat tee gag aat gte aag ete age aag aga aaa
       Arg Met Lys Asn Ser Glu Asn Val Lys Leu Ser Lys Arg Lys
tgt gtg gaa caa tgg aaa tac tgc acc cga gag tcc tta tgt tgc gcg
                                                                          96
Cys Val Glu Gln Trp Lys Tyr Cys Thr Arg Glu Ser Leu Cys Cys Ala
ggt ttg tgt ttg ttt agt ttc tgc att cta taacgctaat ccagagtcgt
                                                                         146
Gly Leu Cys Leu Phe Ser Phe Cys Ile Leu
atattccgtc taagetccac ctggcactgt ctggtatgtt cctgccagtg actggtctca
                                                                         206
taccqcttag actotggtcc gtottctctg caaccacagg agaacgtgca ttattacaat
                                                                         266
aaacgcatac tgc
                                                                         279
<210> 235
<211> 40
<212> PRT
<213> Conus textile
<400> 235
Arg Met Lys Asn Ser Glu Asn Val Lys Leu Ser Lys Arg Lys Cys Val
Glu Gln Trp Lys Tyr Cys Thr Arg Glu Ser Leu Cys Cys Ala Gly Leu
Cys Leu Phe Ser Phe Cys Ile Leu
<210> 236
<211>
      27
<212> PRT
<213> Conus textile
<220>
<221> PEPTIDE
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<222>
       (1)..(27)
<223>
       Xaa at residues 4 and 12 is Glu or gamma-carboxy-Glu; Xaa at resi
       due 6 is Trp (D or L) or bromo-Trp (D or L); Xaa at residue 8 is
       Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phos
       pho-Tyr
<400> 236
Lys Cys Val Xaa Gln Xaa Lys Xaa Cys Thr Arg Xaa Ser Leu Cys Cys
Ala Gly Leu Cys Leu Phe Ser Phe Cys Ile Leu
<210>
       237
<211> 510
<212>
       DNA
<213> Conus textile
<220>
<221> CDS
<222> (223)..(471)
<400> 237
cagagoogot ctggtgtgca gacctgtctc cagooctccg totccctgat cggtggttct
                                                                      60
geotgeatag etgtettete cacgaagett tecacaggta taaataaege tteagtetee
                                                                      120
egteetgtat tgggeegeeg ttacaageea gacegataca geeaggteea gtetaetttg
                                                                      180
cgagtgagtt aaaagctcca gcattctacc agcatcacca ga atg aag gtg agc
                                                                      234
                                               Met Lys Val Ser
age gtg ctg atc gtg get acg ctg aca ctg acc gca ggc cag ctg gtt
                                                                      282
Ser Val Leu Ile Val Ala Thr Leu Thr Leu Thr Ala Gly Gln Leu Val
agt gct tct tcc cat tac tca aaa gat gtc cag att ctt cct tct gtg
                                                                      330
Ser Ala Ser Ser His Tyr Ser Lys Asp Val Gln Ile Leu Pro Ser Val
aga toa got gac gaa gtg gaa aat too gag aat gto agg oto ago aag
                                                                      378
Arg Ser Ala Asp Glu Val Glu Asn Ser Glu Asn Val Arg Leu Ser Lys
aga aga tgt gtg gaa caa tgg gaa gtc tgc ggc ata atc ttg ttc tcc
                                                                      426
Arg Arg Cys Val Glu Gln Trp Glu Val Cys Gly Ile Ile Leu Phe Ser
tca tca tgt tgc ggg cag ttg tgt ttg ttt ggt ttc tgc gtt cta
                                                                      471
Ser Ser Cys Cys Gly Gln Leu Cys Leu Phe Gly Phe Cys Val Leu
                                            80
taacgctaat ccagagtcgt atattccgtc taagctcca
                                                                     510
<210> 238
<211> 83
<212> PRT
<213> Conus textile
<400> 238
Met Lys Val Ser Ser Val Leu Ile Val Ala Thr Leu Thr Leu Thr Ala
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Gly Gln Leu Val Ser Ala Ser Ser His Tyr Ser Lys Asp Val Gln Ile

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10

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25
Leu Pro Ser Val Arg Ser Ala Asp Glu Val Glu Asn Ser Glu Asn Val
Arg Leu Ser Lys Arg Arg Cys Val Glu Gln Trp Glu Val Cys Gly Ile
Ile Leu Phe Ser Ser Cys Cys Gly Gln Leu Cys Leu Phe Gly Phe
Cys Val Leu
<210> 239
<211> 29
<212> PRT
<213> Conus textile
<220>
<221> PEPTIDE
<222>
       (1)..(29)
      Xaa at residues 3 and 6 is Glu or gamma-carboxy-Glu; Xaa at resid
       ue 5 is Trp (D or L) or bromo-Trp (D or L)
<400> 239
Cys Val Xaa Gln Xaa Xaa Val Cys Gly Ile Ile Leu Phe Ser Ser Ser
Cys Cys Gly Gln Leu Cys Leu Phe Gly Phe Cys Val Leu
                                25
<210> 240
<211> 27
<212>
      PRT
<213> Conus textile
<220>
<221> PEPTIDE
<222>
      (1)..(27)
<223> Xaa at residues 9 and 13 is Glu or gamma-carboxy-Glu; Xaa at resi
       dues 4, 7 and 23 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-
       sulpho-Tyr or O-phospho-Tyr
<400> 240
Cys Gly Gly Xaa Ser Thr Xaa Cys Xaa Val Asp Ser Xaa Cys Cys Ser
Asp Asn Cys Val Arg Ser Xaa Cys Thr Leu Phe
<210> 241
<211> 27
<212> PRT
<213> Conus textile
<220>
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<222>
       (1)..(27)
<223> Xaa at residues 8 and 13 is Glu or gamma-carboxy-Glu
<400> 241
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Gly Cys Asn Asn Ser Cys Gln Xaa His Ser Asp Cys Xaa Ser His Cys

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Ile Cys Thr Ser Arg Gly Cys Gly Ala Val Asn
                                25
<210>
       242
<211>
      373
<212> DNA
<213> Conus tulipa
<220>
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<222>
      (22) .. (258)
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                                                                       51
                        Met Ser Gly Leu Gly Ile Met Val Leu Thr
ctt cta ctt ctt gtg tcc atg gca acc agt cat cgt tat gca aga gaa
                                                                       99
Leu Leu Leu Val Ser Met Ala Thr Ser His Arg Tyr Ala Arg Glu
aag cag geg acg ega agg gac gea gte aac gte aga egg aga age aga
                                                                      147
Lys Gln Ala Thr Arg Arg Asp Ala Val Asn Val Arg Arg Arg Ser Arg
cca aaa aca aag gag tgc gaa agg tac tgt gag ctg gag gaa aag cac
                                                                      195
Pro Lys Thr Lys Glu Cys Glu Arg Tyr Cys Glu Leu Glu Glu Lys His
tgc tgc tgc ata aga agt aac gga ccc aaa tgt tcc aga ata tgc ata
                                                                      243
Cys Cys Cys Ile Arg Ser Asn Gly Pro Lys Cys Ser Arg Ile Cys Ile
ttc aaa ttt tgg tgt tagttttctg tacactgtcc attcattatc ttatcagtac
                                                                      298
Phe Lys Phe Trp Cys
75
aagtgtaaac gagacatgtc agaaagtcga aggttgtgcg taatttgata agcattgttt
                                                                     358
actgggacga acgga
                                                                      373
<210> 243
<211>
       79
<211> /9
<212> PRT
<213> Conus tulipa
<400> 243
Met Ser Gly Leu Gly Ile Met Val Leu Thr Leu Leu Leu Leu Val Ser
Met Ala Thr Ser His Arg Tyr Ala Arg Glu Lys Gln Ala Thr Arg Arg
Asp Ala Val Asn Val Arg Arg Arg Ser Arg Pro Lys Thr Lys Glu Cys
Glu Arg Tyr Cys Glu Leu Glu Glu Lys His Cys Cys Cys Ile Arg Ser
Asn Gly Pro Lys Cys Ser Arg Ile Cys Ile Phe Lys Phe Trp Cys
<210> 244
<211>
       37
<212> PRT
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<213> Conus tulipa
<220>
 <221> PEPTIDE
<222>
       (1)..(37)
<223> Xaa at residues 5, 7, 11, 13 and 14 is Glu or gamma-carboxy-Glu;
       Xaa at residues 1 and 25 is Pro or hydroxy-Pro; Xaa at residue 36
        is Trp (D or L) or bromo-Trp (D or L);
<220>
<221> PEPTIDE
<222>
       (1)..(37)
 <223> Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-
       sulpho-Tyr or O-phospho-Tyr
<400> 244
Xaa Lys Thr Lys Xaa Cys Xaa Arg Xaa Cys Xaa Leu Xaa Xaa Lys His
Cys Cys Cys Ile Arg Ser Asn Gly Xaa Lys Cys Ser Arg Ile Cys Ile
            2.0
Phe Lys Phe Xaa Cys
<210> 245
<211>
       381
<212> DNA
<213> Conus tulipa
<220>
<221> CDS
<222> (22)..(267)
<400> 245
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                                                                      51
                        Met Ser Gly Leu Gly Ile Met Val Leu Thr
ctt ctc ctt ctt gtg cta atg aca acc agt cat cag gat gca gga gag
                                                                      99
Leu Leu Leu Val Leu Met Thr Thr Ser His Gln Asp Ala Gly Glu
aag cag gcg atg caa agg gac gca aag aac ttc agt cgg aga aga tta
                                                                     147
Lys Gln Ala Met Gln Arg Asp Ala Lys Asn Phe Ser Arg Arg Leu
gtc att cgg aga cca aaa aca agg gag tgc gaa atg cag tgt gag cag
                                                                     195
Val Ile Arg Arg Pro Lys Thr Arg Glu Cys Glu Met Gln Cys Glu Gln
                            50
gag gag aaa cac tgc tgc cgc gta aga gat ggt acg ggc caa tgt gcc
                                                                     243
Glu Glu Lys His Cys Cys Arg Val Arg Asp Gly Thr Gly Gln Cys Ala
cct aag tgc ttg gga att aac tgg tagtttctgt acactgtctc attcattatc
                                                                     297
Pro Lys Cys Leu Gly Ile Asn Trp
75
                    RΛ
ttatcagtac acgtgtaacg agacatgtca gaaagtcgaa ggtagtgcgt aatttgataa
                                                                     357
gcattgttta ctgggacgaa cgga
                                                                     381
<210> 246
<211> 82
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35

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<212> PRT
<213> Conus tulipa
<400> 246
Met Ser Gly Leu Gly Ile Met Val Leu Thr Leu Leu Leu Val Leu
Met Thr Thr Ser His Gln Asp Ala Gly Glu Lys Gln Ala Met Gln Arg
Asp Ala Lys Asn Phe Ser Arg Arg Arg Leu Val Ile Arg Arg Pro Lys
Thr Arg Glu Cys Glu Met Gln Cys Glu Gln Glu Lys His Cys Cys
Arg Val Arg Asp Gly Thr Gly Gln Cys Ala Pro Lys Cys Leu Gly Ile
Asn Trp
<210> 247
<211> 36
<212> PRT
<213> Conus tulipa
<220>
<221> PEPTIDE
<222>
      (1)..(36)
      Xaa at residues 5, 7, 11, 13 and 14 is Glu or gamma-carboxy-Glu;
       Xaa at residues 1 and 29 is Pro or hydroxy-Pro; Xaa at residue 36
        is Trp (D or L) or bromo-Trp (D or L)
<400> 247
Xaa Lys Thr Arg Xaa Cys Xaa Met Gln Cys Xaa Gln Xaa Xaa Lys His
Cys Cys Arg Val Arg Asp Gly Thr Gly Gln Cys Ala Xaa Lys Cys Leu
Gly Ile Asn Xaa
        35
<210> 248
<211> 363
<212>
      DNA
<213> Conus tulipa
<220>
<221> CDS
<222> (1)..(264)
<400> 248
atg atg teg aaa atg gga get atg ttt gtc ctt ttg ctt ctt ttc acc
                                                                      48
Met Met Ser Lys Met Gly Ala Met Phe Val Leu Leu Leu Leu Phe Thr
ctg gca tcc agc cag cag gaa gga gat gtc cag gca agg aaa aca cgc
                                                                      96
Leu Ala Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr Arg
ctg aag agc gac ttc tat cgt gct ctg cca agg ttt ggc cca ata tgc
                                                                     144
Leu Lys Ser Asp Phe Tyr Arg Ala Leu Pro Arg Phe Gly Pro Ile Cys
```

40

act tgt ttt aaa agc cag aac tgt cgg ggt tct tgt gaa tgc atg tca Thr Cys Phe Lys Ser Gln Asn Cys Arg Gly Ser Cys Glu Cys Met Ser 50 60	
cot coc ggt tgt tac tgc agt aac aat ggc att cgt gaa cga gga tgc 240 Pro Pro Gly Cys Tyr Cys Ser Asn Asn Gly Ile Arg Glu Arg Gly Cys 65 70 80	
tog tgt aca tgt oca ggg act ggt tgaatgattt gaaaaattca gagcaatatg 294 Ser Cys Thr Cys Pro Gly Thr Gly 85	
ttgcagaaaa accgaagacc gagacttctc acaataaatc cataaagaca ttaaaaaaaa 354	
aaaaaaaaa 363	
<210> 249 <211> 88 <212> PRT <213> Conus tulipa	
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Leu Ala Ser Ser Gln Gln Glu Gly Asp Val Gln Ala Arg Lys Thr Arg 20 25 30	
Leu Lys Ser Asp Phe Tyr Arg Ala Leu Pro Arg Phe Gly Pro Ile Cys $35 \hspace{1cm} 40 \hspace{1cm} 45$	
Thr Cys Phe Lys Ser Gln Asn Cys Arg Gly Ser Cys Glu Cys Met Ser 50 60	
Pro Pro Gly Cys Tyr Cys Ser Asn Asn Gly Ile Arg Glu Arg Gly Cys 65 70 80	
Ser Cys Thr Cys Pro Gly Thr Gly 85	
<210> 250 <211> 44 <212> PRT <213> Conus tulipa	
<220> <221> PEPTIDE <222> (1)(44) <222> (1)(44) <223> Xaa at residues 18 and 34 is Glu or gamma-carboxy-Glu; Xaa at residues 3, 22, 23 and 42 is Pro or hydroxy-Pro; Xaa at residue 26 i s Tyr, 1251-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-ph ospho-Tyr	
<pre><400> 250 Phe Gly Xaa Ile Cys Thr Cys Phe Lys Ser Gln Asn Cys Arg Gly Ser 1 5 10</pre>	
Cys Xaa Cys Met Ser Xaa Xaa Gly Cys Xaa Cys Ser λ sn Asn Gly Ile 20 25 30	
Arg Xaa Arg Gly Cys Ser Cys Thr Cys Xaa Gly Thr $$35$$	
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<211> 383	
<pre><212> DNA <213> Conus tulipa</pre>	
<220> <221> CDS <222> (1)(276)	
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ctg aag agc gac ttc tat cgt act ctg gca ata tct gac aga gga tgc Leu Lys Ser Asp Phe Tyr Arg Thr Leu Ala Ile Ser Asp Arg Gly Cys 35 40 45	144
act ggc aac tgt gat tgg acg tgt agc ggt gat tgc agc tgc cag ggc Thr Gly Asn Cys Asp Trp Thr Cys Ser Gly Asp Cys Ser Cys Gln Gly 50 60	192
aca tct gac tcg tgt cac tgc att cca cca aaa tca ata ggc aac aga Thr Ser Asp Ser Cys His Cys Ile Pro Pro Lys Ser Ile Gly Asn Arg 70 75 80	240
tgc cgg tgt cag tgt aaa aga aaa atc gaa att gac tgattctttt Cys Arg Cys Gln Cys Lys Arg Lys Ile Glu Ile Asp 85	286
aactcgttga acgatttaaa aatcagacca atatgtaggc agaaaaccga agactctgag	346
actctcgtaa taatcgtaag caaaaaaaaa aaaaaaaa	
	383
<210> 252 <211> 92 <212> PRT <213> Conus tulipa	383
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<220>
<221> PEPTIDE
       (1)..(46)
<222>
<223> Xaa at residue 44 is Glu or gamma-carboxy-Glu; Xaa at residues 27
        and 28 is Pro or hydroxy-Pro; Xaa at residue 8 is Trp (D or L) o
        r bromo-Trp (D or L)
<400> 253
Gly Cys Thr Gly Asn Cys Asp Xaa Thr Cys Ser Gly Asp Cys Ser Cys
Gln Gly Thr Ser Asp Ser Cys His Cys Ile Xaa Xaa Lys Ser Ile Gly
Asn Arg Cys Arg Cys Gln Cys Lys Arg Lys Ile Xaa Ile Asp
<210> 254
<211> 404
<212> DNA
<213> Conus virgo
<220>
<221> CDS
<222> (7)..(243)
<400> 254
ggatcc atg aaa ctg acg tgt gtg gtg atc atc act gtg ctg ttc ctg
Met Lys Leu Thr Cys Val Val Ile Ile Thr Val Leu Phe Leu
                                                                             48
acg gcc agt cag ctc att aca gct gat tac tcc aga gat cag cgg cag
                                                                             96
Thr Ala Ser Gln Leu Ile Thr Ala Asp Tyr Ser Arg Asp Gln Arg Gln
tac cgt gca gtg agg ttg gga gat gaa atg cgg aat ttc aaa ggt gcc
Tyr Arg Ala Val Arg Leu Gly Asp Glu Met Arg Asn Phe Lys Gly Ala
                                                                             144
                  35
 agg gac tgc ggg gga caa ggt gaa ggt tgt tat act caa cct tgc tgc
                                                                             192
Arg Asp Cys Gly Gly Gln Gly Glu Gly Cys Tyr Thr Gln Pro Cys Cys
 cet ggt etg egg tge egt gge ggt aet gga gga gge gta tge eaq
                                                                             240
 Pro Gly Leu Arg Cys Arg Gly Gly Gly Thr Gly Gly Gly Val Cys Gln
ctg tagtaatagt ttggcatctg atatttcccc tctgtgctcc accetcttt
                                                                             293
Leu
gcctgattca tccttaccta tgtgtggtca tgaaccactc agtagctaca cctctggtgg
attcagagaa cgtatatcaa aataaaacca cattgcaata aaaaaaaaa a
                                                                             404
<210> 255
<211> 79
<212> PRT
<213> Conus virgo
 <400> 255
 Met Lys Leu Thr Cys Val Val Ile Ile Thr Val Leu Phe Leu Thr Ala
 Ser Gln Leu Ile Thr Ala Asp Tyr Ser Arg Asp Gln Arg Gln Tyr Arg
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<212> PRT

20 25 30 Ala Val Arg Leu Gly Asp Glu Met Arg Asn Phe Lys Gly Ala Arg Asp Cys Gly Gly Gln Gly Glu Gly Cys Tyr Thr Gln Pro Cys Cys Pro Gly Leu Arg Cys Arg Gly Gly Gly Thr Gly Gly Gly Val Cys Gln Leu <210> 256 <211> 32 <212> PRT <213> Conus virgo <220> <221> PEPTIDE <222> (1)..(32) <223> Xaa at residue 7 is Glu or gamma-carboxy-Glu; Xaa at residues 13 and 16 is Pro or hydroxy-Pro; Xaa at residue 10 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr <400> 256 Asp Cys Gly Gly Gln Gly Xaa Gly Cys Xaa Thr Gln Xaa Cys Cys Xaa Gly Leu Arg Cys Arg Gly Gly Gly Thr Gly Gly Gly Val Cys Gln Leu <210> 257 <211> 285 <212> DNA <213> Conus radiatus <220> <221> <222> (4)..(225) <400> 257 atc atg cag aaa ctg aca atc ctg ctt ctt gtt gct gct ata ctg atg 48 Met Gln Lys Leu Thr Ile Leu Leu Val Ala Ala Ile Leu Met 96 teg ace cag gte etg att caa ggt ggt gga gaa aaa ege caa aaa gte Ser Thr Gln Val Leu Ile Gln Gly Gly Gly Glu Lys Arg Gln Lys Val 20 aac att ttt tca aaa aga aag aca gat get gag ace tgg tgg gag gge 144 Asn Ile Phe Ser Lys Arg Lys Thr Asp Ala Glu Thr Trp Trp Glu Gly gaa tgc tct aat tgg tta gga agt tgt tcg acg ccc tca aat tgc tgt 192 Glu Cys Ser Asn Trp Leu Gly Ser Cys Ser Thr Pro Ser Asn Cys Cys ctc aag agt tgt aat ggg cac tgc aca ttg tgg tgatgaactc tgaccacaaa Leu Lys Ser Cys Asn Gly His Cys Thr Leu Trp 70 285 gccatccaac atcaccqctc tcctcttcaq aqtcttcaaq <210> 258 <211> 74

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<213> Conus radiatus
<400> 258
Met Gln Lys Leu Thr Ile Leu Leu Leu Val Ala Ala Ile Leu Met Ser
Thr Gln Val Leu Ile Gln Gly Gly Glu Lys Arg Gln Lys Val Asn
Ile Phe Ser Lys Arg Lys Thr Asp Ala Glu Thr Trp Trp Glu Gly Glu
Cys Ser Asn Trp Leu Gly Ser Cys Ser Thr Pro Ser Asn Cys Cys Leu
Lys Ser Cys Asn Gly His Cys Thr Leu Trp
<210> 259
<211> 31
<212> PRT
<213> Conus radiatus
<220>
<221> PEPTIDE
<222> (1)..(31)
<223> Xaa at residues 3 and is Glu or gamma-carboxy-Glu; Xaa at residue
         16 is Pro or hydroxy-Pro; Xaa at residues 1, 2, 9 and 31 is Trp
        (D or L) or bromo-Trp (D or L)
<400> 259
Xaa Xaa Xaa Gly Xaa Cys Ser Asn Xaa Leu Gly Ser Cys Ser Thr Xaa
Ser Asn Cys Cys Leu Lys Ser Cys Asn Gly His Cys Thr Leu Xaa
<210> 260
<211> 296
<212> DNA
<213> Conus radiatus
<220>
<221> CDS
<222> (1)..(237)
<400> 260
 atc atg cag aaa ctg ata atc ctg ctt ctt gtt gct gct gta ctg atg
 Ile Met Gln Lys Leu Ile Ile Leu Leu Leu Val Ala Ala Val Leu Met
tcc acc cag gcc ctg att caa ggt ggt gga gga aaa cgc caa cag gca Ser Thr Gln Ala Leu Ile Gln Gly Gly Gly Gly Lys Arg Gln Gln Ala
                                                                               96
 aag agc aag tat ttt too gaa aga aag gca oot got aag ogt tgg ttt
                                                                              144
 Lys Ser Lys Tyr Phe Ser Glu Arg Lys Ala Pro Ala Lys Arg Trp Phe
gga cac gaa gaa tgc act tat tgg ttg ggg cct tgt gag gtg gac gac Gly His Glu Glu Cys Thr Tyr Trp Leu Gly Pro Cys Glu Val Asp Asp 50 60
                                                                              192
                                                                              237
 acg tgt tgt tct gcc agt tgt gag tcc aag ttc tgc ggg ttg tgg
 Thr Cys Cys Ser Ala Ser Cys Glu Ser Lys Phe Cys Gly Leu Trp
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1007555-52

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tgatggacac tgaccacaag tcatcctaca tcgccactct cctgttcaga gtcttcaag
                                                                      296
<210> 261
<211>
      79
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<213> Conus radiatus
<400> 261
Ile Met Gln Lys Leu Ile Ile Leu Leu Val Ala Ala Val Leu Met
Ser Thr Gln Ala Leu Ile Gln Gly Gly Gly Lys Arg Gln Gln Ala
Lys Ser Lys Tyr Phe Ser Glu Arg Lys Ala Pro Ala Lys Arg Trp Phe
Gly His Glu Glu Cys Thr Tyr Trp Leu Gly Pro Cys Glu Val Asp Asp
Thr Cys Cys Ser Ala Ser Cys Glu Ser Lys Phe Cys Gly Leu Trp
<210>
       262
<211>
       33
<212> PRT
<213> Conus radiatus
<220>
<221>
       PEPTIDE
<222>
       (1)..(33)
<223> Xaa at residues 5, 6, 15 adn 26 is Glu or gamma-carboxy-Glu; Xaa
       at residue 13 is Pro or hydroxy-Pro; Xaa at residues 1, 10 and 33
        is Trp (D or L) or bromo-Trp (D or L);
<220>
<221>
       PEPTIDE
<222>
       (1)..(33)
       Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-
       sulpho-Tyr or O-phospho-Tyr
<400> 262
Xaa Phe Gly His Xaa Xaa Cys Thr Xaa Xaa Leu Gly Xaa Cys Xaa Val
Asp Asp Thr Cys Cys Ser Ala Ser Cys Xaa Ser Lys Phe Cys Gly Leu
Xaa
<210>
       263
<211>
       306
<212>
      DNA
<213>
      Conus wittigi
<220>
<221> CDS
<222> (7)..(231)
<400> 263
ggatcc atg aaa ctg acg tgt gtg gtg atc atc gcc ttg ctg ttc ctg
Met Lys Leu Thr Cys Val Val Ile Ile Ala Leu Leu Phe Leu
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<211> 381 <212> DNA

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Thr Ala Cys Gln Leu Ile Thr Ala Asp Tyr Ser Arg Asp Glu Gln Ser
ggc agt aca gtg cgg ttt cta gac aga cca cgg cgt ttt ggt tcg ttc
                                                                       144
Gly Ser Thr Val Arg Phe Leu Asp Arg Pro Arg Arg Phe Gly Ser Phe
ata ccg tgc gcc cgt tta ggt gaa cca tgt acc ata tgc tgc cgt cct
                                                                       192
Ile Pro Cys Ala Arg Leu Gly Glu Pro Cys Thr Ile Cys Cys Arg Pro
ttg agg tgc cgt gaa agc gga aca ccc aca tgt caa gtg tgattgtctg
                                                                       241
Leu Arg Cys Arg Glu Ser Gly Thr Pro Thr Cys Gln Val
gcatctgata tttcccctct gtgccctacc ctcttttgcc tgagtcatcc atacctgtgc
                                                                       301
tcgag
                                                                       306
<210> 264
<211> 75
<212> PRT
<213> Conus wittigi
<400> 264
Met Lys Leu Thr Cys Val Val Ile Ile Ala Leu Leu Phe Leu Thr Ala
Cys Gln Leu Ile Thr Ala Asp Tyr Ser Arg Asp Glu Gln Ser Gly Ser
Thr Val Arg Phe Leu Asp Arg Pro Arg Arg Phe Gly Ser Phe Ile Pro
Cys Ala Arg Leu Gly Glu Pro Cys Thr Ile Cys Cys Arg Pro Leu Arg
Cys Arg Glu Ser Gly Thr Pro Thr Cys Gln Val
<210> 265
<211> 33
<212> PRT
<213> Conus wittigi
<220>
<221> PEPTIDE
<222> (1)..(33)
       Xaa at residues 12 and 25 is Glu or gamma-carboxy-Glu; Xaa at res
       idues 6, 13, 20 and 29 is Pro or hydroxy-Pro
<400> 265
Phe Gly Ser Phe Ile Xaa Cys Ala Arg Leu Gly Xaa Xaa Cys Thr Ile
Cys Cys Arg Xaa Leu Arg Cys Arg Xaa Ser Gly Thr Xaa Thr Cys Gln
Val
<210> 266
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<213> Conus regius
<220>
<221> CDS
<222> (7)..(240)
<400> 266
ggatee atg aaa etg acg tge gtg gtg ate atg gee teg etg tte etg
                                                                       48
       Met Lys Leu Thr Cys Val Val Ile Met Ala Ser Leu Phe Leu
geg gee tgt caa tte ett aca get gga ggt gae tea aga agt aag cag
                                                                        96
Ala Ala Cys Gln Phe Leu Thr Ala Gly Gly Asp Ser Arg Ser Lys Gln
cgg tat cct gat tgg agg ctg ggc tac cga aag tcc aag ttg atg gct
                                                                       144
Arg Tyr Pro Asp Trp Arg Leu Gly Tyr Arg Lys Ser Lys Leu Met Ala
aag aag acg tgc ctg gaa cat aac aaa cta tgt tgg tat gat aga gac
                                                                       192
Lys Lys Thr Cys Leu Glu His Asn Lys Leu Cys Trp Tyr Asp Arg Asp
tgc tgc acc ata tat tgt aat gaa aac aaa tgc ggc gtg aaa cct caa
                                                                       240
Cys Cys Thr Ile Tyr Cys Asn Glu Asn Lys Cys Gly Val Lys Pro Gln
tgaatgtttc acacacacac acacacacac acacacacac acacacacac acacacacac
                                                                       300
acacacaca atotggcgtc tgaccattcc ccctctqtqc tctatcctct tqttcctqaq
                                                                       360
tcatccatac ctgtgctcga g
                                                                       381
<210> 267
<211> 78
<212> PRT
<213> Conus regius
<400> 267
Met Lys Leu Thr Cys Val Val Ile Met Ala Ser Leu Phe Leu Ala Ala
Cys Gln Phe Leu Thr Ala Gly Gly Asp Ser Arg Ser Lys Gln Arg Tyr
Pro Asp Trp Arg Leu Gly Tyr Arg Lys Ser Lys Leu Met Ala Lys Lys
Thr Cys Leu Glu His Asn Lys Leu Cys Trp Tyr Asp Arg Asp Cys Cys
Thr Ile Tyr Cys Asn Glu Asn Lys Cys Gly Val Lys Pro Gln
                     7.0
<210> 268
<211> 30
<212> PRT
<213> Conus regius
<220>
<221> PEPTIDE
<222>
       (1)..(30)
<223> Xaa at residues 4 and 22 is Glu or gamma-carboxy-Glu; Xaa at resi
       due 29 is Pro or hydroxy-Pro; Kaa at residue 10 is Trp (D or L) o
```

r bromo-Trp (D or L); Xaa at residues 11 and 19 is Tyr, 125I-Tyr,

```
mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 268
Thr Cys Leu Xaa His Asn Lys Leu Cys Xaa Xaa Asp Arg Asp Cys Cys
Thr Ile Xaa Cys Asn Xaa Asn Lys Cys Gly Val Lys Xaa Gln
<210> 269
<211> 285
<212> DNA
<213> Conus radiatus
<220>
<221> CDS
<222> (1)..(225)
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atc atg cag aaa ctg aca atc ctg ctt ctt gtt gct gct ata ctg atg
Ile Met Gln Lys Leu Thr Ile Leu Leu Leu Val Ala Ala Ile Leu Met
                                                                                48
tog acc cag gtc ctg att caa ggt ggt gga gaa aaa cgc caa aaa gtc
                                                                                96
Ser Thr Gln Val Leu Ile Gln Gly Gly Gly Glu Lys Arg Gln Lys Val
aac att ttt tca aaa aga aag aca gat get gag ace tgg tgg gag gge
Asn Ile Phe Ser Lys Arg Lys Thr Asp Ala Glu Thr Trp Trp Glu Gly
                                                                               144
gaa tgc tet aat tgg tta gga agt tgt tcg acg ccc tca aat tgc tgt
                                                                               192
Glu Cys Ser Asn Trp Leu Gly Ser Cys Ser Thr Pro Ser Asn Cys Cys
ctc aag agt tgt aat ggg cac tgc aca ttg tgg tgatgaactc tgaccacaaa
                                                                               245
Leu Lys Ser Cys Asn Gly His Cys Thr Leu Trp
gocatocaac atcacogoto tootottoag agtottoaag
                                                                               285
<210> 270
<211> 75
<212> PRT
<213> Conus radiatus
<400> 270
Ile Met Gln Lys Leu Thr Ile Leu Leu Leu Val Ala Ala Ile Leu Met
Ser Thr Gln Val Leu Ile Gln Gly Gly Gly Glu Lys Arg Gln Lys Val
Asn Ile Phe Ser Lys Arg Lys Thr Asp Ala Glu Thr Trp Trp Glu Gly
Glu Cys Ser Asn Trp Leu Gly Ser Cys Ser Thr Pro Ser Asn Cys Cys
Leu Lys Ser Cys Asn Gly His Cys Thr Leu Trp
<210> 271
<211> 31
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<212> PRT
<213> Conus radiatus
<220>
<221>
       PEPTIDE
<222>
      (1)..(31)
     Xaa at residues 3 and 5 is Glu or gamma-carboxy-Glu; Xaa at resid
       ue 16 is Pro or hydroxy-Pro; Xaa at residues 1,2, 9 and 31 is Trp
       (D or L) or bromo-Trp (D or L)
<400> 271
Xaa Xaa Xaa Gly Xaa Cys Ser Asn Xaa Leu Gly Ser Cys Ser Thr Xaa
Ser Asn Cys Cys Leu Lys Ser Cys Asn Gly His Cys Thr Leu Xaa
<210>
      272
<211> 296
<212> DNA
<213> Conus radiatus
<220>
<221> CDS
<222> (4)..(237)
<400> 272
atc atg cag aaa ctg ata atc ctg ctt ctt gtt gct gct gta ctg atg
                                                                      48
   Met Gln Lys Leu Ile Ile Leu Leu Leu Val Ala Ala Val Leu Met
   1
                                                                      96
toc acc cag gcc ctg att caa ggt ggt gga gga aaa cgc caa cag gca
Ser Thr Gln Ala Leu Ile Gln Gly Gly Gly Lys Arg Gln Gln Ala
               20
aag agc aag tat ttt too gaa aga aag goa oot got aag ogt tgg ttt
                                                                     144
Lys Ser Lys Tyr Phe Ser Glu Arg Lys Ala Pro Ala Lys Arg Trp Phe
            35
gga cac gaa gaa tgc act tat tgg ttg ggg cct tgt gag gtg gac gac
                                                                     192
Gly His Glu Glu Cys Thr Tyr Trp Leu Gly Pro Cys Glu Val Asp Asp
acg tgt tgt tct gcc agt tgt gag tcc aag ttc tgc ggg ttg tgg
                                                                     237
Thr Cys Cys Ser Ala Ser Cys Glu Ser Lys Phe Cys Gly Leu Trp
tgatggacac tgaccacaag tcatcctaca tcgccactct cctqttcaga qtcttcaag
                                                                     296
<210> 273
<211>
       78
<212>
      PRT
<213> Conus radiatus
Met Gln Lys Leu Ile Ile Leu Leu Leu Val Ala Ala Val Leu Met Ser
Thr Gln Ala Leu Ile Gln Gly Gly Gly Lys Arg Gln Gln Ala Lys
Ser Lys Tyr Phe Ser Glu Arg Lys Ala Pro Ala Lys Arg Trp Phe Gly
```

His Glu Glu Cys Thr Tyr Trp Leu Gly Pro Cys Glu Val Asp Asp Thr

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50
                                              60
Cys Cys Ser Ala Ser Cys Glu Ser Lys Phe Cys Gly Leu Trp 65 70 75
<210>
       274
<211>
       33
<212> PRT
<213> Conus radiatus
<220>
<221>
      PEPTIDE
<222>
       (1)..(33)
<223>
       Xaa at residues 5, 6, 15 and 26 is Glu or gamma-carboxy-Glu; Xaa
       at residue 13 is Pro or hydroxy-Pro; Xaa at residues 1, 10 and 33
        is Trp (D or L) or bromo-Trp (D or L);
<220>
<221>
       PEPTIDE
       (1)..(33)
<222>
<223>
       Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-
       sulpho-Tyr or O-phospho-Tyr
<400> 274
Xaa Phe Gly His Xaa Xaa Cys Thr Xaa Xaa Leu Gly Xaa Cys Xaa Val
Asp Asp Thr Cys Cys Ser Ala Ser Cys Xaa Ser Lys Phe Cys Gly Leu
Xaa
<210>
       275
<211>
       387
<212>
      DNA
<213>
      Conus spurius
<220>
<221> CDS
<222> (21)..(212)
<400> 275
ggaagetgae tacaageaga atg ege tgt etc eea gte tte gte att ett etg
                                                                        5.3
                      Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu
ctg ctg att cca tct gca cct agc act gat gcc cga ccg aag acc aaa
                                                                       101
Leu Leu Ile Pro Ser Ala Pro Ser Thr Asp Ala Arg Pro Lys Thr Lys
gat gat gtg cgc ctg gca tct ttc cac ggt aag gca aag cga acc cta
                                                                       149
Asp Asp Val Arg Leu Ala Ser Phe His Gly Lys Ala Lys Arg Thr Leu
caa ata cct agg ggg aat atc cac tgt tgc aca aaa tat cag ccg tgc
                                                                      197
Gln Ile Pro Arg Gly Asn Ile His Cys Cys Thr Lys Tyr Gln Pro Cys
tgt tct tca cca tca taaagggaaa tgactttgat gagacccctg cgaactgtcc
                                                                      252
Cys Ser Ser Pro Ser
ctggatgtga aatttggaaa cgagactgtt cctttcgcgc gtgttcgtgg aatttcgaat
                                                                      312
ggtcgttaat aacacgctgc ctcttgcaaa ctacaatctc tctgtccttt atctgtggac
                                                                      372
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tggatgtcaa cactg
                                                                     387
<210> 276
<211> 64
<212> PRT
<213> Conus spurius
<400> 276
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Ile Pro Ser
Ala Pro Ser Thr Asp Ala Arg Pro Lys Thr Lys Asp Asp Val Arg Leu
Ala Ser Phe His Gly Lys Ala Lys Arg Thr Leu Gln Ile Pro Arg Gly
Asn Ile His Cys Cys Thr Lys Tyr Gln Pro Cys Cys Ser Ser Pro Ser
<210> 277
<211> 17
<212> PRT
<213> Conus spurius
<220>
<221> PEPTIDE
<222>
      (1)..(17)
<223> Xaa at residues 11 and 16 is Pro or hydroxy-Pro; Xaa at residue 9
        is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-
       phospho-Tyr
<400> 277
Gly Asn Ile His Cys Cys Thr Lys Xaa Gln Xaa Cys Cys Ser Ser Xaa
Ser
<210> 278
<211>
      206
<212>
      DNA
<213> Conus nobilis
<220>
<221> CDS
<222> (1)..(183)
<400> 278
atg ege tgt etc eca gte tte gte att ett etg etg etg act gea tet
                                                                      48
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Thr Ala Ser
gca cca agc gtt gat gcc cga ccg aag acc aaa gat gat gtg ctc cgg
                                                                      96
Ala Pro Ser Val Asp Ala Arg Pro Lys Thr Lys Asp Asp Val Leu Arg
gca tct ttc cgc gat aat gca aag agt acc cta caa aga ctt tgg aac
                                                                     144
Ala Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu Trp Asn
aaa cgc atc tgc tgc ccc ata att ctt tgg tgc tgt ggt taaccagcat
                                                                     193
Lys Arg Ile Cys Cys Pro Ile Ile Leu Trp Cys Cys Gly
gaagttccca gga
                                                                     206
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<210> 279
<211> 61
 <212> PRT
 <213> Conus nobilis
<400> 279
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Ala Pro Ser Val Asp Ala Arg Pro Lys Thr Lys Asp Asp Val Leu Arg
Ala Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu Trp Asn
Lys Arg Ile Cys Cys Pro Ile Ile Leu Trp Cys Cys Gly
<210> 280
<211> 10
<212> PRT
<213> Conus nobilis
<220>
<221> PEPTIDE
<222> (1)..(10)
<223> Xaa at residue 4 is Pro or hydroxy-Pro; Xaa at residue 8 is Trp (
       D or L) or bromo-Trp (D or L)
<400> 280
Ile Cys Cys Xaa Ile Ile Leu Xaa Cys Cys
<210> 281
<211> 205
<212> DNA
<213> Conus betulinus
<220>
<221> CDS
<222> (1)..(183)
<220>
<221> misc_feature
<222> (1)..(205)
<223> n is unknown
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                                                                      48
Met Arg Cys Leu Pro Val Phe Ile Ile Leu Leu Val Leu Ile Ála Ser
gca cet ace gtt gat gec ega eca aag ate gaa gat gat gag tee etg
                                                                      96
Ala Pro Thr Val Asp Ala Arg Pro Lys Ile Glu Asp Asp Glu Ser Leu
gea tet tte cat gnt cat naa eea eea tna nng ntn can ett ttg aac
Ala Ser Phe His Xaa His Xaa Pro Pro Xaa Xaa Xaa Thr Leu Leu Asn
        35
                        40
                                               45
aaa cgc aat tgc tgc cca gac tct cct ccg tgc tgt cat taaccagcat
                                                                     193
Lys Arg Asn Cys Cys Pro Asp Ser Pro Pro Cys Cys His
gaaggttcag ga
                                                                     205
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<210> 282

161

14

1.4 0

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<211>
           61
    <212>
           PRT
    <213> Conus betulinus
    <400> 282
    Met Arg Cys Leu Pro Val Phe Ile Ile Leu Leu Val Leu Ile Ala Ser
    Ala Pro Thr Val Asp Ala Arg Pro Lys Ile Glu Asp Asp Glu Ser Leu
    Ala Ser Phe His Xaa His Xaa Pro Pro Xaa Xaa Xaa Thr Leu Leu Asn
    Lys Arg Asn Cys Cys Pro Asp Ser Pro Pro Cys Cys His
Stelle
(3)
19
    <210> 283
    <211> 11
    <212> PRT
<213> Conus betulinus
N
    <220>
500
    <221>
           PEPTIDE
    <223> Xaa at residues 4, 7 and 8 is Pro or hydroxy-Pro
114
110
    <400> 283
    Asn Cys Cys Xaa Asp Ser Xaa Xaa Cys Cys His
    <21.0>
            284
71
     <211>
            569
     <212>
            DNA
     <213> Conus purpurascens
     <400> 284
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     tctatgacat ttcagttgtt agatcatcca gttccacaga tggaaagaca gagagatagt
     agettqeaaq tqqcaqcqtq ttqttaacqa ccattcqaca ttccatgaac acgtqtgaaa
     ggagcagtet getttecaaa tetgacatee agggacagtt tgcaggggte teatecaaag
     teatetteet ttateecaaa gtacageace geatetgttt tggacageaa eegegtttet
     tocaaaatot ttgtagggtt cottttgcat tatcgtggaa agatgccagg ggcatatcat
     ctttggtctt cggatgagca tcaacgcaag gtgcagatgg aatcagcagc agaagaatga
     egaagactgg cagacagege attetgettg tagteagett cegaatteea ageegaatte
     tgcagatate catcacactg geggeegete gageatgeat ctagagggee caattegeee
     tatagtgagt cgtatgacaa ttcactggc
     <210> 285
     <211> 63
     <212> PRT
     <213> Conus purpurascens
     <400> 285
     Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Ile Pro Ser
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180

240 300

360

420 480

540

569

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15
                                    10
1
Ala Pro Cys Val Asp Ala His Pro Lys Thr Lys Asp Asp Met Pro Leu
Ala Ser Phe His Asp Asn Ala Lys Gly Thr Leu Gln Arg Phe Trp Lys
Lys Arg Gly Cys Cys Pro Lys Gln Met Arg Cys Cys Thr Leu Gly
<210> 286
<211> 12
<212> PRT
<213> Conus purpurascens
<220>
      PEPTIDE
<221>
<222>
       (1)..(12)
      Xaa at residue 4 is Pro or hydroxy-Pro
<400> 286
Gly Cys Cys Xaa Lys Gln Met Arg Cys Cys Thr Leu
<210>
      287
      221
<211>
<212>
      DNA
<213> Conus ammiralis
<220>
<221> CDS
       (21)..(206)
<222>
<400> 287
ggaagetgae tacaageaga atg cac tgt etc eca gte gte gte att ett etg
                      Met His Cys Leu Pro Val Val Val Ile Leu Leu
 ctg ctg act gca tct ggt gga cct agc gtt gat gcc cga ctg aag acc
                                                                      101
Leu Leu Thr Ala Ser Gly Gly Pro Ser Val Asp Ala Arg Leu Lys Thr
 aaa gat gat gtg ccc ctg tca tct ttc cgc gat aat aca aag agt atc
                                                                      149
 Lys Asp Asp Val Pro Leu Ser Ser Phe Arg Asp Asn Thr Lys Ser Ile
                             35
                                                                      197
 cta caa aga ctt tgg aag cga ggc aac tgc tgt gaa ttt tgg gag ttt
 Leu Gln Arg Leu Trp Lys Arg Gly Asn Cys Cys Glu Phe Trp Glu Phe
                                                                       221
 tgc tgt gat taaccagcat gaagg
 Cys Cys Asp
 <210> 288
 <211> 62
 <212> PRT
 <213> Conus ammiralis
 <400> 288
 Met His Cys Leu Pro Val Val Val Ile Leu Leu Leu Leu Thr Ala Ser
 Gly Gly Pro Ser Val Asp Ala Arg Leu Lys Thr Lys Asp Asp Val Pro
```

53

N

#1

2.5 Leu Ser Ser Phe Arg Asp Asn Thr Lys Ser Ile Leu Gln Arg Leu Trp 40 Lys Arg Gly Asn Cys Cys Glu Phe Trp Glu Phe Cys Cys Asp

20

<400> 291

35

30

101

149

194

209

Met His Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser Gly Pro Ser Val Asp Ala Gln Pro Lys Thr Glu Val Asp Val Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Arg Ala Leu Gln Arg Leu Pro Arg

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Cys Cys Glu Tyr Trp Lys Leu Cys Cys Gly
      292
<210>
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<213>
      Conus dalli
<220>
      PEPTIDE
<221>
<222>
      (1)..(9)
      Xaa at residue 1 is Glu or gamma-carboxy-Glu; Xaa at residue 5 is
<223>
        Trp (D or L) or bromo-Trp (D or L); Xaa at residue 4 is Tyr, 125
       I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 292
Cys Cys Xaa Xaa Xaa Lys Leu Cys Cys
<210>
       293
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       DNA
<213>
       Conus omaria
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       CDS
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      (21)..(203)
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                       Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu
ctg cta act gca tct gca cct age gtt gat gcc cga ccg aag gcc aaa
Leu Leu Thr Ala Ser Ala Pro Ser Val Asp Ala Arg Pro Lys Ala Lys
             15
gat gat gtg ccc ctg gca tct ttc cgt gat aat gca aag agt acc cta
                                                                       149
Asp Asp Val Pro Leu Ala Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu
caa aga ctt cag gac aaa cgc gtt tgc tgt ggc tat aag ttt ttt tgc
                                                                       197
Gln Arg Leu Gln Asp Lys Arg Val Cys Cys Gly Tyr Lys Phe Phe Cys
                                                                       218
 tgt cgt taaccagcat gaagg
Cys Arg
 60
<210> 294
 <211> 61
 <212>
       PRT
 <213> Conus omaria
 <400> 294
 Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
 Ala Pro Ser Val Asp Ala Arg Pro Lys Ala Lys Asp Asp Val Pro Leu
 Ala Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu Gln Asp
 Lys Arg Val Cys Cys Gly Tyr Lys Phe Phe Cys Cys Arg
```

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<210> 295
<211> 11
<212> PRT
<213> Conus omaria
<220>
<221> PEPTIDE
<222> (1)..(11)
<223> Xaa at residue 5 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-
        sulpho-Tyr or O-phospho-Tyr
<400> 295
Val Cys Cys Gly Xaa Lys Phe Phe Cys Cys Arg
<210> 296
<211> 212
<212> DNA
<213> Conus aulicus
<220>
<221> CDS
<222> (21)..(197)
<400> 296
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                        Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu
ctg ctg act gca tct gca cct aac gtt gat gcc caa ccg aag acc aaa Leu Leu Thr Ala Ser Ala Pro Asn Val Asp Ala Gln Pro Lys Thr Lys
                                                                        101
 gat gat gtg eec etg gea tet ttg eac gat gat gea aag agt gea eta
                                                                          149
 Asp Asp Val Pro Leu Ala Ser Leu His Asp Asp Ala Lys Ser Ala Leu
                               35
                                                                          197
 caa cat tgg aac caa cgc tgc tgc ccc atg atc tat tgg tgc tgt agt
 Gln His Trp Asn Gln Arg Cys Cys Pro Met Ile Tyr Trp Cys Cys Ser
 taaccagcat gaagg
 <210> 297
 <211> 59
<212> PRT
 <213> Conus aulicus
 <400> 297
 Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
 Ala Pro Asn Val Asp Ala Gln Pro Lys Thr Lys Asp Asp Val Pro Leu
20 25 30
 Ala Ser Leu His Asp Asp Ala Lys Ser Ala Leu Gln His Trp Asn Gln
 Arg Cys Cys Pro Met Ile Tyr Trp Cys Cys Ser
 <210> 298
 <211> 10
 <212> PRT
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<213> Conus aulicus
<220>
<221>
       PEPTIDE
<222>
       (1)..(10)
       Xaa at residue 3 is Pro or hydroxy-Pro; Xaa at residue 7 is Trp (
<223>
       D or L) or bromo-Trp (D or L); Xaa at residue 6 is Tyr, 125I-Tyr,
        mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 298
Cys Cys Xaa Met Ile Xaa Xaa Cys Cys Ser
<210>
       299
<211>
       212
<212>
      DNA
<213>
      Conus aulicus
<220>
<221>
      CDS
<222>
       (21)..(197)
<400> 299
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                                                                       53
                      Met His Cys Leu Pro Val Phe Val Ile Leu Leu
ctg ctg act gca tct gca cct aac gtt gat gcc caa ccg aag acc aaa
                                                                      101
Leu Leu Thr Ala Ser Ala Pro Asn Val Asp Ala Gln Pro Lys Thr Lys
gat gat gtg ccc ctg gca tct ttg cac gat gat gca aag agt gca cta
                                                                      149
Asp Asp Val Pro Leu Ala Ser Leu His Asp Asp Ala Lys Ser Ala Leu
        30
caa cat tgg aac caa cgc tgc tgc ccc gag atc tat tgg tgc tgt agt
                                                                      197
Gln His Trp Asn Gln Arg Cys Cys Pro Glu Ile Tyr Trp Cys Cys Ser
    45
                                                                      212
taaccagcat gaagg
<210> 300
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       59
<212> PRT
<213> Conus aulicus
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Met His Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Ala Pro Asn Val Asp Ala Gln Pro Lys Thr Lys Asp Asp Val Pro Leu
Ala Ser Leu His Asp Asp Ala Lys Ser Ala Leu Gln His Trp Asn Gln
Arg Cys Cys Pro Glu Ile Tyr Trp Cys Cys Ser
<210> 301
<211> 10
 <212> PRT
<213> Conus aulicus
<220>
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<221> PEPTIDE
<222>
       (1)..(10)
<223>
      Xaa at residue 4 is Glu or gamma-carboxy-Glu; Xaa at residue 3 is
       Pro or hydroxy-Pro; Xaa at residue 7 is Trp (D or L) or bromo-Tr p (D or L); Xaa at residue 6 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
       iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 301
Cys Cys Xaa Xaa Ile Xaa Xaa Cys Cys Ser
<210>
       302
<211>
       215
<212>
      DNA
<213> Conus ammiralis
<220>
<221>
      CDS
<222>
       (21)..(200)
<400> 302
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                       Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu
                                                                         101
ctg ctg att gca tct gca cct agc gtt gat gcc caa ccg aag acc aaa
Leu Leu Ile Ala Ser Ala Pro Ser Val Asp Ala Gln Pro Lys Thr Lys
                                  20
gat gat gtg tcc ctg gca tct ttg cac gat aat ata aag agt act cta
                                                                         149
Asp Asp Val Ser Leu Ala Ser Leu His Asp Asn Ile Lys Ser Thr Leu
                             35
                                                  40
caa aca ett tgg aac aaa ege tge tge cee eet gtg att tgg tge tgt
                                                                         197
Gln Thr Leu Trp Asn Lys Arg Cys Cys Pro Pro Val Ile Trp Cys Cys
                                               55
ggt taaccagcat aaagg
                                                                         215
Gly
60
<210> 303
<211>
       60
<212>
       PRT
<213> Conus ammiralis
<400> 303
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Ile Ala Ser
Ala Pro Ser Val Asp Ala Gln Pro Lys Thr Lys Asp Asp Val Ser Leu
Ala Ser Leu His Asp Asn Ile Lys Ser Thr Leu Gln Thr Leu Trp Asn
Lys Arg Cys Cys Pro Pro Val Ile Trp Cys Cys Gly
<210> 304
<211> 9
<212> PRT
<213> Conus ammiralis
<220>
<221> PEPTIDE
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<222> (1)..(9)   
<223> Xaa at residues 3 and 4 is Pro or hydroxy-Pro; Xaa at residue 7 i
       s Trp (D or L) or bromo-Trp (D or L)
<400> 304
Cys Cys Xaa Xaa Val Ile Xaa Cys Cys
<210> 305
       215
<211>
<212> DNA
<213> Conus aulicus
<220>
<221> CDS
<222> (21)..(200)
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                        Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu
ctg ctg act gca tct gga cct agc gtt gat gcc cga ccg aag acc aaa
Leu Leu Thr Ala Ser Gly Pro Ser Val Asp Ala Arg Pro Lys Thr Lys
                                                                           101
gat gat gtg cct ctg tca tct ttc cgc gat aac gca aag agt atc cta
                                                                           149
Asp Asp Val Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser Ile Leu
caa aga cgt tgg aac aac tat tgc tgc acg aat gag ctt tgg tgc tgt
                                                                           197
Gln Arg Arg Trp Asn Asn Tyr Cys Cys Thr Asn Glu Leu Trp Cys Cys
                                                                           215
ggt taaccagcat gaagg
Gly
60
<210> 306
<211> 60
<212> PRT
<213> Conus aulicus
<400> 306
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Gly Pro Ser Val Asp Ala Arg Pro Lys Thr Lys Asp Asp Val Pro Leu
             20
Ser Ser Phe Arg Asp Asn Ala Lys Ser Ile Leu Gln Arg Arg Trp Asn
Asn Tyr Cys Cys Thr Asn Glu Leu Trp Cys Cys Gly
<210> 307
<211> 13
<212> PRT
<213> Conus aulicus
<220>
<221> PEPTIDE
<222>
       (1)..(13)
<223> Xaa at residue 9 is Glu or gamma-carboxy-Glu; Xaa at residues 1 a
```

<222>

(1)..(13)

<223> Xaa at residues 1 and 6 is Pro or hydroxy-Pro

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nd 11 is Trp (D or L) or bromo-Trp (D or L); Xaa at residue 4 is
       Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phos
       pho-Tyr
<400> 307
Xaa Asn Asn Xaa Cys Cys Thr Asn Xaa Leu Xaa Cys Cys
<210> 308
<211> 218
<212> DNA
<213> Conus dalli
<220>
<221> CDS
<222> (21)..(203)
<400> 308
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                                                                       53
                      Met His Cys Leu Pro Val Phe Val Ile Leu Leu
ctg ctg act gca tct gga cct agc gtt gat gcc cga ccg aag acc gaa
                                                                      101
Leu Leu Thr Ala Ser Gly Pro Ser Val Asp Ala Arg Pro Lys Thr Glu
gat gat gtg ccc ctg tca tct ttc cgc gat aat aca aag agt acc cta
                                                                      149
Asp Asp Val Pro Leu Ser Ser Phe Arg Asp Asn Thr Lys Ser Thr Leu
caa aga ctt ttg aag cca gtc aac tgc tgt cct att gat caa tct tgc
                                                                      197
Gln Arg Leu Leu Lys Pro Val Asn Cys Cys Pro Ile Asp Gln Ser Cys
                                                                      218
tgt tct taaccagcat gaagg
Cys Ser
60
<210> 309
<211> 61
<212> PRT
<213> Conus dalli
<400> 309
Met His Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Gly Pro Ser Val Asp Ala Arg Pro Lys Thr Glu Asp Asp Val Pro Leu
             20
Ser Ser Phe Arg Asp Asn Thr Lys Ser Thr Leu Gln Arg Leu Leu Lys
Pro Val Asn Cys Cys Pro Ile Asp Gln Ser Cys Cys Ser
<210> 310
<211> 13
<212> PRT
<213> Conus dalli
<220>
<221> PEPTIDE
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<400> 310
Xaa Val Asn Cys Cys Xaa Ile Asp Gln Ser Cys Cys Ser
<210> 311
<211> 239
<212> DNA
<213> Conus consors
<220>
<221> CDS
<222> (7)..(228)
<400> 311
ggatec atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc
                                                                           48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
gtt toc atc cct toa gat ogt goa tot gaa ggo agg aat goo gta gto
Val Ser Ile Pro Ser Asp Arg Ala Ser Glu Gly Arg Asn Ala Val Val
                                                                          96
 cac gag aga gcg cet gag etg gte gtt acg gcc acc acg act tgc tgt
                                                                          144
His Glu Arg Ala Pro Glu Leu Val Val Thr Ala Thr Thr Thr Cys Cys
ggt tat gat ccg atg aca ata tgc cct cct tgc atg tgc act cat tcc
                                                                          192
Gly Tyr Asp Pro Met Thr Ile Cys Pro Pro Cys Met Cys Thr His Ser
             50
                                                                          239
tgt cca cca aaa aga aaa cca ggc cgc aga aac gac tgatgctcga g
Cys Pro Pro Lys Arg Lys Pro Gly Arg Arg Asn Asp
<210> 312
<211>
 <211> 74
<212> PRT
 <213> Conus consors
 <400> 312
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 Ile Pro Ser Asp Arg Ala Ser Glu Gly Arg Asn Ala Val Val His Glu
 Arg Ala Pro Glu Leu Val Val Thr Ala Thr Thr Thr Cys Cys Gly Tyr
 Asp Pro Met Thr Ile Cys Pro Pro Cys Met Cys Thr His Ser Cys Pro
 Pro Lys Arg Lys Pro Gly Arg Arg Asn Asp
 <210> 313
 <211> 36
<212> PRT
 <213> Conus consors
 <220>
 <221> PEPTIDE
 <222>
        (1)..(36)
 <223> Xaa at residue 3 is Glu or gamma-carboxy-Glu; Xaa at residues 2,
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17, 22, 23, 31, 32 and 36 is Pro or hydroxy-Pro; Xaa at residue 15 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr <400> 313 Ala Xaa Xaa Leu Val Val Thr Ala Thr Thr Thr Cys Cys Gly Xaa Asp Xaa Met Thr Ile Cys Xaa Xaa Cys Met Cys Thr His Ser Cys Xaa Xaa 25 Lys Arg Lys Xaa 35 <210> 314 <211> 272 <212> DNA <213> Conus aurisiacus <220> <221> CDS (7)..(237) <222> <400> 314 48 ggatce atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val 96 gtt tcc atc cct tca gat cgt gca tct gat ggc agg aat gcc gca gtc Val Ser Ile Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Val aac gag aga caa tot tgg ctg gtc cct tcg aca atc acg act tgc tgt 144 Asn Glu Arg Gln Ser Trp Leu Val Pro Ser Thr Ile Thr Thr Cys Cys gga tat gat eeg ggg aca atg tge eet eet tge agg tge aat aat ace 192 Gly Tyr Asp Pro Gly Thr Met Cys Pro Pro Cys Arg Cys Asn Asn Thr tgt aaa cca aaa aaa cca aaa cca gga aaa ggc cgc aga aac gac 237 Cys Lys Pro Lys Lys Pro Lys Pro Gly Lys Gly Arg Arg Asn Asp 272 tgatgeteca ggaccetetg aaccacgace tegag <210> 315 <211> 77 <212> PRT <213> Conus aurisiacus <400> 315 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser Ile Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Val Asn Glu Arg Gln Ser Trp Leu Val Pro Ser Thr Ile Thr Thr Cys Cys Gly Tyr Asp Pro Gly Thr Met Cys Pro Pro Cys Arg. Cys Asn Asn Thr Cys Lys

Pro Lys Lys Pro Lys Pro Gly Lys Gly Arg Arg Asn Asp

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75
65
                     7.0
<210> 316
<211>
       39
<212> PRT
<213> Conus aurisiacus
<220>
<221>
       PEPTIDE
<222>
       (1)..(39)
       Xaa at residue 1 is Gln or pyro-Gln; Xaa at residues 6, 17, 22, 2 3, 32, 35 and 37 is Pro or hydroxy-Pro; Xaa at residue 3 is Trp (
<223>
        D or L) or bromo-Trp (D or L); Xaa at residue 15 is Tyr, 125I-Tyr
        , mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 316
Xaa Ser Xaa Leu Val Xaa Ser Thr Ile Thr Thr Cys Cys Gly Xaa Asp
Xaa Gly Thr Met Cys Xaa Xaa Cys Arg Cys Asn Asn Thr Cys Lys Xaa
                                   25
Lys Lys Xaa Lys Xaa Gly Lys
<210> 317
<211> 266
<212> DNA
<213> Conus consors
<220>
<221> CDS
<222> (7)..(231)
<400> 317
ggatec atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc
                                                                              48
        Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
                                                                              96
qtt tcc atc cct tca gat cgt gca tct gat ggc agg aat gcc gta gtc
Val Ser Ile Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Val Val
cac gag aga gcg cct gag ctg gtc gtt acg gcc acc acg act tgc tgt
His Glu Arg Ala Pro Glu Leu Val Val Thr Ala Thr Thr Cys Cys
                                                                             144
                                                                             192
 ggt tat gat cog atg aca tgg tgc cot tot tgc atg tgc act tat tcc
 Gly Tyr Asp Pro Met Thr Trp Cys Pro Ser Cys Met Cys Thr Tyr Ser
 tqt ccc cac caa aqq aaa aaa cca ggc cgc aga aac gac tgatgctcca
                                                                             241
 Cys Pro His Gln Arg Lys Lys Pro Gly Arg Arg Asn Asp
                                                                             266
 ggaccetetg aaccacgace tegag
 <210> 318
 <211> 75
<212> PRT
 <213> Conus consors
 <400> 318
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
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Ile Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Val Val His Glu
                                  25
Arg Ala Pro Glu Leu Val Val Thr Ala Thr Thr Thr Cys Cys Gly Tyr
Asp Pro Met Thr Trp Cys Pro Ser Cys Met Cys Thr Tyr Ser Cys Pro
His Gln Arg Lys Lys Pro Gly Arg Arg Asn Asp
<210> 319
<211> 37
<212> PRT
<213> Conus consors
<220>
<221>
       PEPTIDE
<222>
       (1)..(37)
       Xaa at residue 3 is Glu or gamma-carboxy-Glu; Xaa at residues 2,
<223>
        17, 22, 31 and 37 is Pro or hydroxy-Pro; Xaa at residue 20 is Trp
        (D or L) or bromo-Trp (D or L);
<220>
<221> PEPTIDE
       (1)..(37)
<222>
       Xaa at residues 15 and 28 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iod
<223>
        o-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 319
Ala Xaa Xaa Leu Val Val Thr Ala Thr Thr Thr Cys Cys Gly Xaa Asp
Xaa Met Thr Xaa Cys Xaa Ser Cys Met Cys Thr Xaa Ser Cys Xaa His
Gln Arg Lys Lys Xaa
<210>
       320
<211>
        260
 <212>
       DNA
<213> Conus magus
<220>
 <221> CDS
<222> (7)..(231)
<220>
<221> misc_feature
<222> (1)..(260)
 <223> n is unknown
 <400> 320
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Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Ser Val
                                                                           48
                                                                           96
 gtt tcc atc cct tca gat cgt gca tct gat ggc ggg aat gcc gta gtc
 Val Ser Ile Pro Ser Asp Arg Ala Ser Asp Gly Gly Asn Ala Val Val
 cac gag aga gcg cct gag ctg gtc gtt acg gcc acc acg act tgc tgt
                                                                          144
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								122	2						
His Glu	Arg	Ala	Pro 35	Glu	Leu	Val	Val	Thr 40	Ala	Thr	Thr	Thr	Cys 45	Cys	
ggt tat Gly Tyr	gat Asp	ccg Pro 50	atg Met	aca Thr	ata I le	tgc Cys	cct Pro 55	ccc Pro	tgc Cys	atg Met	tgc Cys	act Thr 60	cat His	tcc Ser	192
tgt cca Cys Pro	cca Pro 65	aaa Lys	gga Gly	aaa Lys	cca Pro	ggc Gly 70	cgc Arg	agg Arg	aac Asn	gac Asp	tga	tgt	ccago	jac	241
ctctgaa	cca (egaer	ncga	3											260
<211> <212>	321 74 PRT Conu	s ma	gus												
<400> Met Phe 1	321 Thr	Val	Phe 5	Leu	Leu	Val	Val	Leu 10	Ala	Thr	Ser	Val	Val 15	Ser	
Ile Pro	Ser	Asp 20	Arg	Ala	Ser	Asp	Gly 25	Gly	Asn	Ala	Val	Val 30	His	Glu	
Arg Ala	Pro 35	Glu	Leu	Val	Val	Thr 40	Ala	Thr	Thr	Thr	Cys 45	Cys	Gly	Tyr	
Asp Pro	Met	Thr	Ile	Cys	Pro 55	Pro	Cys	Met	Cys	Thr 60	His	Ser	Cys	Pro	
Pro Lys 65	Gly	Lys	Pro	Gly 70	Arg	Arg	Asn	Asp							
<212>	322 36 PRT Conu	ıs ma	gus												
<222>	Xaa 17, 5 is	.(36 at r 22,	esid 23, , 12	31, 5I-T	32 a	nd 3	6 is	Pro	or	hydr	оху~	Pro;	Xaa	residue at resi lpho-Tyr	due 1
<400> Ala Xaa 1	322 a Xaa	ı Lev	Val	. Val	Thr	Ala	Thr	Thr	Thr	Cys	Cys	Gl	Xaa 15	Asp	
Xaa Met	Thr	Ile 20	Cys	Xaa	Xaa	Cys	Met 25	Cys	Thr	His	Ser	Cys 30	Xaa	Xaa	
Lys Gly	y Lys 35	s Xaa	ı												
<210> <211> <212> <213>	323 251 DNA Cont	us au	ırisi	Lacus	3										
<220> <221>	CDS														

<210> 326

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<222> (23)..(202)
<400> 323
                                                                          52
quattoqccc ttqaggatcc gt gtg gtt ctg ggt cca gaa cct gat ggc agg
                          Val Val Leu Gly Pro Glu Pro Asp Gly Arg
                                                                         100
aat gcc gca gtc aac gag aga cag aaa tgg ctg gtc cat tcg aaa atc
Asn Ala Ala Val Asn Glu Arg Gln Lys Trp Leu Val His Ser Lys Ile
acg tat tgc tgt ggt tat aat aag atg gac atg tgc cct cct tgc atg
                                                                         148
Thr Tyr Cys Cys Gly Tyr Asn Lys Met Asp Met Cys Pro Pro Cys Met
tgc act tat tcc tgt ccc ccc cta aaa aaa aaa aga cca ggc cgc aga
                                                                         196
Cys Thr Tyr Ser Cys Pro Pro Leu Lys Lys Lys Arg Pro Gly Arg Arg
aac qac tqatqctcca ggaccctctg aaccacgacc tcgagcgaag ggcgaattc
                                                                         251
Asn Asp
    60
<210> 324
<211>
      60
<212>
      PRT
<213> Conus aurisiacus
<400> 324
Val Val Leu Gly Pro Glu Pro Asp Gly Arg Asn Ala Ala Val Asn Glu
Arg Gln Lys Trp Leu Val His Ser Lys Ile Thr Tyr Cys Cys Gly Tyr
Asn Lys Met Asp Met Cys Pro Pro Cys Met Cys Thr Tyr Ser Cys Pro
Pro Leu Lys Lys Lys Arg Pro Gly Arg Arg Asn Asp
<210> 325
<211> 38
<212> PRT
<213> Conus aurisiacus
<220>
<221> PEPTIDE
<222>
       (1)..(38)
<223> Xaa at residue 1 is Gln or pyro-Gln; Xaa at residues 22, 23, 31,
        32 and 38 is Pro or hydroxy-Pro; Xaa at residue 3 is Trp (D or L) or bromo-Trp (D or L); Xaa at residues 11, 15 and 28 is Tyr, 12
        5I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 325
Xaa Lys Xaa Leu Val His Ser Lys Ile Thr Xaa Cys Cys Gly Xaa Asn
Lys Met Asp Met Cys Xaa Xaa Cys Met Cys Thr Xaa Ser Cys Xaa Xaa
             20
 Leu Lys Lys Lys Arg Xaa
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<212> DNA
<213> Conus aurisiacus
<220>
<221> CDS
<222> (23)..(163)
<400> 326
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Val Val Leu Gly Pro Ala Phe Asp Gly Arg
                                                                              52
aat gee gea gte aac gag aga geg eet tgg aeg gte gtt aeg gee acc
Asn Ala Ala Val Asn Glu Arg Ala Pro Trp Thr Val Val Thr Ala Thr
acg aat tgc tgc ggt att acc ggg cca ggc tgc ctt cct tgc cgt tgt Thr Asn Cys Cys Gly Ile Thr Gly Pro Gly Cys Leu Pro Cys Arg Cys
                                                                             148
act caa aca tgt ggc tgatgctcca ggaccctctg aaccacgacc tcgagcgaag
                                                                             203
Thr Gln Thr Cys Gly
                                                                             212
ggcgaattc
<210> 327
<211> 47
<212> PRT
<213> Conus aurisiacus
<400> 327
Val Val Leu Gly Pro Ala Phe Asp Gly Arg Asn Ala Ala Val Asn Glu
Arg Ala Pro Trp Thr Val Val Thr Ala Thr Thr Asn Cys Cys Gly Ile
 Thr Gly Pro Gly Cys Leu Pro Cys Arg Cys Thr Gln Thr Cys Gly
<210> 328
 <211> 29
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 <213> Conus aurisiacus
 <220>
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 <222> (1)..(29)
       Xaa at residues 2, 18 and 22 is Pro or hydroxy-Pro; Xaa at residu
        e 3 is Trp (D or L) or bromo-Trp (D or L)
 <400> 328
 Ala Xaa Xaa Thr Val Val Thr Ala Thr Thr Asn Cys Cys Gly Ile Thr
 Gly Xaa Gly Cys Leu Xaa Cys Arg Cys Thr Gln Thr Cys
 <210> 329
 <211> 218
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<222>
       (21) .. (203)
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                                                                           53
                       Met Arg Cys Leu Pro Val Leu Ile Ile Leu Leu
ctg ctg act gca tct gca cct ggc gtt gtt gtc cta ccg aag acc gaa
Leu Leu Thr Ala Ser Ala Pro Gly Val Val Val Leu Pro Lys Thr Glu
gat gat gtg ecc atg tea tet gte tac ggt aat gga aag agt atc eta
                                                                          149
Asp Asp Val Pro Met Ser Ser Val Tyr Gly Asn Gly Lys Ser Ile Leu
                                                                          197
cga ggg att ctg agg aac ggt gtt tgc tgt ggc tat aag ttg tgc ctt Arg Gly Ile Leu Arg Asn Gly Val Cys Cys Gly Tyr Lys Leu Cys Leu
                          50
                                                                          218
cca tgt taaccagcat gaagg
Pro Cys
<210> 330
<211> 61
<212> PRT
<213> Conus marmoreus
<400> 330
Met Arg Cys Leu Pro Val Leu Ile Ile Leu Leu Leu Leu Thr Ala Ser
Ala Pro Gly Val Val Val Leu Pro Lys Thr Glu Asp Asp Val Pro Met
 Ser Ser Val Tyr Gly Asn Gly Lys Ser Ile Leu Arg Gly Ile Leu Arg
 Asn Gly Val Cys Cys Gly Tyr Lys Leu Cys Leu Pro Cys
<210> 331
<211> 13
 <212> PRT
 <213> Conus marmoreus
 <220>
 <221> PEPTIDE
 <222>
        (1)..(13)
 <223> Xaa at residue 12 is Pro or hydroxy-Pro; Xaa at residue 7 is Tyr,
         125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-
 <400> 331
 Asn Gly Val Cys Cys Gly Xaa Lys Leu Cys Leu Xaa Cys
 <210> 332
 <211> 238
 <212> DNA
 <213> Conus pennaceus
 <220>
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<222> (27)..(212)

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<222> (28)..(219)
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                               Met Arg Cys Leu Pro Val Phe Val Ile
ctt ctg ctg ctg act gca tct gca cct agc gtt gat gcc aaa gtt cat
                                                                        102
Leu Leu Leu Leu Thr Ala Ser Ala Pro Ser Val Asp Ala Lys Val His
                     15
ctg aag acc aaa ggt gat ggg ccc ctg tca tct ttc cga gat aat gca
Leu Lys Thr Lys Gly Asp Gly Pro Leu Ser Ser Phe Arg Asp Asn Ala
                                                                        198
aaq agt acc cta caa aga ctt cag gac aaa agc act tgc tgt ggc ttt
Lys Ser Thr Leu Gln Arg Leu Gln Asp Lys Ser Thr Cys Cys Gly Phe
aag atg tgt atc cct tgt agt taaccagcat gaaggatcc
                                                                        238
Lys Met Cys Ile Pro Cys Ser
<210>
      333
<211>
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       PRT
<213> Conus pennaceus
<400> 333
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Ala Pro Ser Val Asp Ala Lys Val His Leu Lys Thr Lys Gly Asp Gly
Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu
Gln Asp Lys Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Pro Cys Ser 50 60
<210> 334
<211> 13
<212> PRT
<213> Conus pennaceus
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       PEPTIDE
<222>
       (1)..(13)
<223> Xaa at residue 11 is Pro or hydroxy-Pro
<400> 334
 Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Xaa Cys Ser
 <210> 335
<211> 231
<212> DNA
 <213> Conus pennaceus
 <220>
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stt ctg ctg ctg act gca tct gga cct agc gtt gat gcc cga ctg aag 10 Leu Leu Leu Thr Ala Ser Gly Pro Ser Val Asp Ala Arg Leu Lys .0 15 20 25)1
acc aaa gat gat gtg coc ctg toa tot ttc cga gat aat gca aag agt 14 Phr Lys Asp Asp Val Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser 30 35 40	49
icc cta caa aga ctt cag gac aaa cgc ctt tgc tgt ggc ttt tgg atg Thr Leu Gln Arg Leu Gln Asp Lys Arg Leu Cys Cys Gly Phe Trp Met 45 50 55	97
gt att oot tgt aat taaccagcat gaaggatcc 2: Cys Ile Pro Cys Asn 60	31
<pre><210> 336 <211> 62 <212> PRT <212> PRT <213> Conus pennaceus</pre>	
<400> 336 Wet Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser 1 15 15	
Gly Pro Ser Val Asp Ala Arg Leu Lys Thr Lys Asp Asp Val Pro Leu 20 25 30	
Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu Gln Asp 35 40	
Lys Arg Leu Cys Cys Gly Phe Trp Met Cys Ile Pro Cys Asn 50 60	
<210> 337 <211> 12 <212> PRT <213> Conus pennaceus	
<pre><220> <221> PEPTIDE <222> (1)(12) <223> Xaa at residue 10 is Pro or hydroxy-Pro; Xaa at residue 6 is Tr</pre>	.p
<pre><400> 337 Leu Cys Cys Gly Phe Xaa Met Cys Ile Xaa Cys Asn 1 5 10</pre>	
<210> 338 <211> 244 <212> DNA <213> Conus pennaceus	
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<223> n is unknown
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                                                                     54
                                          Met Arg Cys Leu Pro
ctc ttc gtc att ctt ctg ctg ctg act gca tct gga cct act gtt gat
                                                                     102
Leu Phe Val Ile Leu Leu Leu Thr Ala Ser Gly Pro Thr Val Asp
gee ega etg aag ace aaa gat gat gtg eee etg tea tet tte ega gat
                                                                     150
Ala Arg Leu Lys Thr Lys Asp Asp Val Pro Leu Ser Ser Phe Arg Asp
            25
aat qca aag agt acc cta caa aga ctt cag gac aaa agc act tgc tgt
                                                                     198
Asn Ala Lys Ser Thr Leu Gln Arg Leu Gln Asp Lys Ser Thr Cys Cys
        40
ggc ttt aag atg tgt att cct tgt ggt taaccagcat gaaggatcc
                                                                     244
Gly Phe Lys Met Cys Ile Pro Cys Gly
    55
<210>
       339
<211> 62
<212> PRT
<213> Conus pennaceus
<400> 339
Met Arg Cys Leu Pro Leu Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Gly Pro Thr Val Asp Ala Arg Leu Lys Thr Lys Asp Asp Val Pro Leu
Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu Gln Asp
Lys Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Pro Cys Gly
<210> 340
 <211> 12
 <212> PRT
 <213> Conus pennaceus
 <220>
 <221>
       PEPTIDE
       (1)..(12)
 <222>
 <223> Xaa at residue 11 is Pro or hydroxy-Pro
 <400> 340
 Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Xaa Cys
 <210>
        341
 <211> 250
 <212> DNA
 <213> Conus episcopatus
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<220>
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      (40)..(231)
<220>
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      misc feature
<222>
      (1)..(250)
<223>
       n is unknown
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                                           Met Arg Cys Leu Pro
                                                                      102
gtc ttc gtc att ctt ctg ctg ctg act gca tct gga cct ant gtt gat
Val Phe Val Ile Leu Leu Leu Thr Ala Ser Gly Pro Xaa Val Asp
                                    15
                10
gcc aaa gtt cat etg aag acc aaa ggt gat ggg ccc etg tca tet tte
                                                                      150
Ala Lys Val His Leu Lys Thr Lys Gly Asp Gly Pro Leu Ser Ser Phe
                                 30
            25
cga gat aat gca aag agt acc cta caa aga ctt cag gac aaa agc act
                                                                      198
Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu Gln Asp Lys Ser Thr
tgc tgt ggc tat agg atg tgt gtt cct tgt ggt taaccagcat gaaggatcc
                                                                      250
Cys Cys Gly Tyr Arg Met Cys Val Pro Cys Gly
<210>
      342
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<212>
       PRT
<213>
      Conus episcopatus
<400> 342
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Gly Pro Xaa Val Asp Ala Lys Val His Leu Lys Thr Lys Gly Asp Gly
Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu
Gln Asp Lys Ser Thr Cys Cys Gly Tyr Arg Met Cys Val Pro Cys Gly
<210>
      343
<211>
      12
<212>
       PRT
<213>
       Conus episcopatus
<220>
       PEPTIDE
<221>
<222>
<223>
       Xaa at residue 11 is Pro or hydroxy-Pro; Xaa at residue 6 is Tyr
        , 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho
       -Tyr
<400> 343
Ser Thr Cys Cys Gly Xaa Arg Met Cys Val Xaa Cys
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<210>
       344
<211>
       827
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      DNA
<213>
      Conus marmoreus
<220>
<221>
      CDS
<222>
      (82)..(264)
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                                                                       60
tggaaactga caacaggcag a atg cgc tgt ctc cca gtc ttg atc att ctt
                                                                      111
                        Met Arg Cys Leu Pro Val Leu Ile Ile Leu
                                                                      159
ctq ctq ctq act qca tct qca cct ggc gtt gtt gtc cta ccg aag acc
Leu Leu Leu Thr Ala Ser Ala Pro Gly Val Val Val Leu Pro Lys Thr
gaa gat gat gtg ccc atg tca tct gtc tac ggt aat gga aag agt atc
                                                                      207
Glu Asp Asp Val Pro Met Ser Ser Val Tyr Gly Asn Gly Lys Ser Ile
            30
cta cga gga att ctg agg aac ggt gtt tgc tgt ggc tat aag ttg tgc
                                                                      255
Leu Arg Gly Ile Leu Arg Asn Gly Val Cys Cys Gly Tyr Lys Leu Cys
                                                                      304
cat cca tgt taaccagcat gaagggaaat gactttggat gagacccctg
His Pro Cys
    60
                                                                      364
cgaactgtcc ctggatgtga aatttggaaa gcagactgtt cctttcgcac gtattcgtgg
aatttegaat ggtegtaaac aacaegetge cacttgeagg ctactatete tetgteettt
                                                                      424
catctgtgga aatggatgat ctaacaactg aaatatcaga aatttttcaa tggctataca
                                                                      484
ctatgaccat gtagtcagta attatatcat ttggaccttt tgaaatattt ttcaatatgt
                                                                      544
aaagtttttg caccctggaa aggtcttttg gagttaaata ttttagtatg ttatgttttg
                                                                      604
catacaagtt atagaatgct gtctttcttt ttgttcccac atcaatggtg ggggcagaaa
                                                                      664
ttatttqttt tggtcaatgt aattatgacc tgcatttagt gctatagtga ttgcattttc
                                                                      724
agcgtggaat gtttaatctg caaacagaaa gtggttgatc gactaataaa gatttgcatg
                                                                      784
                                                                      827
gcacaaaaaa aaaaaaaaaa agtactctgc gttgttactc gag
<210>
       345
<211>
       61
<212>
       PRT
<213> Conus marmoreus
<400> 345
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Ala Pro Gly Val Val Val Leu Pro Lys Thr Glu Asp Asp Val Pro Met
             20
Ser Ser Val Tyr Gly Asn Gly Lys Ser Ile Leu Arg Gly Ile Leu Arg
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Asn Gly Val Cys Cys Gly Tyr Lys Leu Cys His Pro Cys

<213> Conus bandanus

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50
                        55
                                           60
<210> 346
<211> 13
<212> PRT
<213> Conus marmoreus
<220>
<221> PEPTIDE
<222>
      (1)..(13)
      Xaa at residue 12 is Pro or hydroxy-Pro; Xaa at residue 7 is Tyr,
        125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-
       Tyr
<400> 346
Asn Gly Val Cys Cys Gly Xaa Lys Leu Cys His Xaa Cys
<210> 347
<211>
      12
<212>
      PRT
<213> Conus marmoreus
<220>
<221> PEPTIDE
<222>
      (1)..(12)
       Xaa at residue 11 is Pro or hydroxy-Pro; Xaa at residue 6 is Tyr,
<223>
        125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-
<400> 347
Gly Val Cys Cys Gly Xaa Lys Leu Cys His Xaa Cys
<210> 348
<211>
      202
<212>
      DNA
<213> Conus bandanus
<220>
<221> CDS
<222> (1)..(183)
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                                                                       48
Met Arg Cys Leu Pro Val Leu Ile Ile Leu Leu Leu Leu Thr Ala Ser
                                                                       96
gca cet ggc gtt gat gtc cta ceg aag acc gaa gat gat gtg cec ctg
Ala Pro Gly Val Asp Val Leu Pro Lys Thr Glu Asp Asp Val Pro Leu
tca tct qtc tac gat aat aca aag agt atc cta cga gga ctt ctg gac
                                                                      144
Ser Ser Val Tyr Asp Asn Thr Lys Ser Ile Leu Arg Gly Leu Leu Asp
                                                                      193
aaa cgt gct tgc tgt ggc tac aag ctt tgc tca cca tgt taaccagcat
Lys Arg Ala Cys Cys Gly Tyr Lys Leu Cys Ser Pro Cys
                                                                      202
gaaggatcc
<210> 349
<211> 61
<212>
       PRT
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<400> 349
Met Arg Cys Leu Pro Val Leu Ile Ile Leu Leu Leu Leu Thr Ala Ser
Ala Pro Gly Val Asp Val Leu Pro Lys Thr Glu Asp Asp Val Pro Leu
Ser Ser Val Tyr Asp Asn Thr Lys Ser Ile Leu Arg Gly Leu Leu Asp
Lys Arg Ala Cys Cys Gly Tyr Lys Leu Cys Ser Pro Cys
    50
<210> 350
<211> 11
<212> PRT
<213> Conus bandanus
<220>
<221> PEPTIDE
       (1)..(11)
<222>
<223>
       Xaa at residue 10 is Pro or hydroxy-Pro; Xaa at residue 5 is Tyr,
        125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-
<400> 350
Ala Cys Cys Gly Xaa Lys Leu Cys Ser Xaa Cys
<210> 351
<211> 221
<212> DNA
<213> Conus aulicus
<220>
<221> CDS
<222> (21)..(206)
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ggaagctgac tacaagcaga atg cgc tgt ctc cca gtc ttc gtc att ctt ctg
                      Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu
ctg ctg act gca tct gga cct agc gtt gat gcc cga ctg aag acc aaa
                                                                      101
Leu Leu Thr Ala Ser Gly Pro Ser Val Asp Ala Arg Leu Lys Thr Lys
                                                                      149
gat gat gtg ccc ctg tca tct ttc cga gat aat gca aag agt acc cta
Asp Asp Val Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu
                             35
                                                                      197
 caa aga cat cag gac aaa agc gtt tgc tgt ggc tat aag ctg tgt ttt
Gln Arg His Gln Asp Lys Ser Val Cys Cys Gly Tyr Lys Leu Cys Phe
                                                                      221
cct tgt ggt taaccagcat gaagg
 Pro Cys Gly
<210> 352
 <211> 62
 <212> PRT
 <213> Conus aulicus
 <400> 352
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Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Gly Pro Ser Val Asp Ala Arg Leu Lys Thr Lys Asp Asp Val Pro Leu
Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg His Gln Asp
Lys Ser Val Cys Cys Gly Tyr Lys Leu Cys Phe Pro Cys Gly
<210>
       353
<211>
       12
<212>
      PRT
<213>
      Conus aulicus
<220>
<221>
      PEPTIDE
<222>
       (1)..(12)
       Xaa at residue 11 is Pro or hydroxy-Pro; Xaa at residue 6 is Tyr,
        125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-
       Tyr
<400> 353
Ser Val Cys Cys Gly Xaa Lys Leu Cys Phe Xaa Cys
<210>
       354
<211>
       312
<212> DNA
<213> Conus textile
<220>
<221> CDS
<222>
      (3)..(50)
<220>
<221>
      misc_feature
      (1) .. (312)
<222>
<223> n is unknown
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                                                                       47
   Gly Ser Asn Gly Val Cys Cys Gly Tyr Arg Met Cys Val Pro Cys
ggt taaccagcat gaagggaaat gactttggat gagacccctg cgaactgtcc
                                                                      100
Gly
ctggatgtga gatttggaaa gcagactgtt cattttgcac gtgttcgtgg aatttcgaat
                                                                      160
                                                                      220
ggtcgttaac aacacgctgc cacttgcaag ctactatctc tctgtccttt tatctgtgga
                                                                      280
actgtatgat ctaacaactg aaatatcata nanatttttc aatgggtatn cactatgcat
atgatcatgt agggttcaag gggtcaagat nc
                                                                      312
<210>
       355
<211> 16
<212> PRT
<213> Conus textile
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<400> 355
Gly Ser Asn Gly Val Cys Cys Gly Tyr Arg Met Cys Val Pro Cys Gly
                                    10
<210> 356
<211> 13
<212> PRT
<213> Conus textile
<220>
<221>
      PEPTIDE
<222> (1)..(13)
<223> Xaa at residue 12 is Pro or hydroxy-Pro; Xaa at residue 7 is Tyr,
       125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-
       Tyr
<400> 356
Asn Gly Val Cys Cys Gly Xaa Arg Met Cys Val Xaa Cys
<210>
      357
<211>
       205
<212> DNA
<213>
      Conus textile
<220>
<221> CDS
<222> (1)..(186)
<400> 357
atg cac tgt ctc cca atc ttc gtc att ctt ctg ctg ctg act gca tct
                                                                       48
Met His Cys Leu Pro Ile Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
gga cct agc gtt gat gcc caa ctg aag acc aaa gat gat gtg ccc ctg
                                                                       96
Gly Pro Ser Val Asp Ala Gln Leu Lys Thr Lys Asp Asp Val Pro Leu
tca tct ttc cga gat cat gca aag agt acc cta cga aga ctt cag gac
                                                                      144
Ser Ser Phe Arg Asp His Ala Lys Ser Thr Leu Arg Arg Leu Gln Asp
aaa cag act tgc tgt ggc tat agg atg tgt gtt cct tgt ggt
                                                                      186
Lys Gln Thr Cys Cys Gly Tyr Arg Met Cys Val Pro Cys Gly
    50
                                                                      205
taaccagcat gaaggatcc
<210> 358
<211>
      62
<212>
      PRT
<213> Conus textile
<400> 358
Met His Cys Leu Pro Ile Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Gly Pro Ser Val Asp Ala Gln Leu Lys Thr Lys Asp Asp Val Pro Leu
20 25 30
Ser Ser Phe Arg Asp His Ala Lys Ser Thr Leu Arg Arg Leu Gln Asp
Lys Gln Thr Cys Cys Gly Tyr Arg Met Cys Val Pro Cys Gly
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<210> 359
<211>
       12
<212> PRT
<213>
      Conus textile
<220>
      PEPTIDE
<221>
<222>
      (1)..(12)
       Xaa at residue 1 is Gln or pyro-Gln; Xaa at residue 11 is Pro or
       hydroxy-Pro; Xaa at residue 6 is Tyr, 125I-Tyr, mono-iodo-Tyr, di
       -iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 359
Xaa Thr Cys Cys Gly Xaa Arg Met Cys Val Xaa Cys
<210>
       360
<211>
       221
<212>
       DNA
<213> Conus ammiralis
<220>
<221>
      CDS
<222>
      (21)..(206)
<400> 360
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                      Met His Tyr Leu Pro Val Phe Val Ile Leu Leu
ctg ctg act gca tct gga cct agc gtt gat gcc caa ctg aag acc aaa
                                                                      101
Leu Leu Thr Ala Ser Gly Pro Ser Val Asp Ala Gln Leu Lys Thr Lys
            1.5
gat gat gtg ccc ctg tca tct ttc cga gat aat gca aag agt acc cta
                                                                      149
Asp Asp Val Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu
        30
cga aga ctc cag tac aaa cag gct tgc tgt ggc ttt aag atg tgt gtt
                                                                      197
Arg Arg Leu Gln Tyr Lys Gln Ala Cys Cys Gly Phe Lys Met Cys Val
cct tgt ggt taaccagcat gaagg
                                                                      221
Pro Cys Gly
<210>
      361
       62
<211>
       PRT
<212>
<213>
      Conus ammiralis
<400> 361
Met His Tyr Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Gly Pro Ser Val Asp Ala Gln Leu Lys Thr Lys Asp Asp Val Pro Leu
Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Arg Arg Leu Gln Tyr
Lys Gln Ala Cys Cys Gly Phe Lys Met Cys Val Pro Cys Gly
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<210> 362
<211>
      12
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      PRT
<213> Conus ammiralis
<220>
<221>
      PEPTIDE
<222>
      (1)..(12)
<223> Xaa at residue 1 is Gln or pyro-Gln; Xaa at residue 11 is Pro or
       hydroxy-Pro
<400> 362
Xaa Ala Cys Cys Gly Phe Lys Met Cys Val Xaa Cys
<210>
      363
      211
<211>
<212>
      DNA
<213> Conus pennaceus
<220>
<221>
      CDS
<222> (1)..(192)
<400> 363
                                                                      48
atg ege tgt etc eea gte tte gte att ett etg etg etg act gea tet
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
                                                                      96
gca cct agc gtt gat gcc aaa gtt cat ctg aag acc aaa ggt gat ggg
Ala Pro Ser Val Asp Ala Lys Val His Leu Lys Thr Lys Gly Asp Gly
            20
                                25
ccc ctg tca tct ttc cga gat aat gca aag agt acc cta caa aga ctt
                                                                     144
Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu
        35
                            40
cag gac aaa agc act tgc tgt ggc ttt aag atg tgt att cct tgt cgt
                                                                     192
Gln Asp Lys Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Pro Cys Arg
taaccagcat gaaggatcc
                                                                      211
<210> 364
<211> 64
<212> PRT
<213> Conus pennaceus
<400> 364
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Ala Pro Ser Val Asp Ala Lys Val His Leu Lys Thr Lys Gly Asp Gly
Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu
Gln Asp Lys Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Pro Cys Arg
<210> 365
      13
<211>
<212>
       PRT
<213> Conus pennaceus
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<221>
      PEPTIDE
       (1)..(13)
       Xaa at residue 13 is Pro or hydroxy-Pro
<223>
<400> 365
Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Xaa Cys Arg
<210>
       366
<211>
       304
       DNA
<212>
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<222> (3)..(50)
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      misc_feature
<222>
       (1) .. (304)
      n is unknown
<223>
<400> 366
ca gga too aat ggg gtt tgt tgt ggc ttt tgg atg tgt att cot tgt
                                                                      47
   Gly Ser Asn Gly Val Cys Cys Gly Phe Trp Met Cys Ile Pro Cys
                                                                      100
aat taaccagcat gaagggaaat gactttggat aagacccctg cgaactgtcc
Asn
ttqqatqtqa qatttqqaaa qcaqactgtt ccttttgcac gtgttcgtgg aatttcgaat
                                                                      160
ggtcgttaac aacacgctgc cacttgcaag ctactatete tetgtcettt catctqtqqa
                                                                      220
                                                                      280
actgtatgat ctaacaactg aaatatcata gaaatttttc aatgggtata cactatgcat
atgaccatgt angggtcaac agno
                                                                      304
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       367
<211>
      16
<212> PRT
<213> Conus pennaceus
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Gly Ser Asn Gly Val Cys Cys Gly Phe Trp Met Cys Ile Pro Cys Asn
<210>
       368
<211>
       14
<212> PRT
<213> Conus pennaceus
<220>
       PEPTIDE
<221>
<222>
       (1)..(14)
       Xaa at residue 12 is Pro or hydroxy-Pro; Xaa at residue 8 is Trp
        (D or L) or bromo-Trp (D or L)
<400> 368
Asn Gly Val Cys Cys Gly Phe Xaa Met Cys Ile Xaa Cys Asn
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<210>
       369
<211>
       218
<212>
       DNA
<213>
       Conus omaria
<220>
<221>
      CDS
      (21)..(203)
<222>
<400> 369
ggaagetgae tacaageaga atg ege tgt etc eca gte tte gte att ett etg
                                                                       5.3
                      Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu
ctg ctg act gca tct gca cct agc gtt gat gcc cga ccg aag gcc aaa
                                                                      101
Leu Leu Thr Ala Ser Ala Pro Ser Val Asp Ala Arg Pro Lys Ala Lys
gat gat gtg ccc ctg tca tct ttc cgt gat aat gca aag agt acc cta
                                                                      149
Asp Asp Val Pro Leu Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu
                             35
caa aga ctt cag gac aaa gac gtt tgc tgt tac gtt aga atg tgt cct
                                                                      197
Gln Arg Leu Gln Asp Lys Asp Val Cys Cys Tyr Val Arg Met Cys Pro
                                                                      218
tgt cgt taaccagcat gaagg
Cys Arg
<210>
       370
<211>
       61
       PRT
<212>
<213>
      Conus omaria
<400> 370
Met Arg Cys Leu Pro Val Phe Val Ile Leu Leu Leu Leu Thr Ala Ser
Ala Pro Ser Val Asp Ala Arg Pro Lys Ala Lys Asp Asp Val Pro Leu
Ser Ser Phe Arg Asp Asn Ala Lys Ser Thr Leu Gln Arg Leu Gln Asp
Lys Asp Val Cys Cys Tyr Val Arg Met Cys Pro Cys Arg
<210>
       371
<211>
       12
<212>
       PRT
<213>
      Conus omaria
<220>
<221>
      PEPTIDE
<222>
       (1)..(12)
       Xaa at residue 10 is Pro or hydroxy-Pro; Xaa at residue 5 is Tyr,
        125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-
       Tyr
<400>
Asp Val Cys Cys Xaa Val Arg Met Cys Xaa Cys Arg
<210> 372
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<212>
      PRT
<213> Conus radiatus
<220>
<221>
      PEPTIDE
<222>
      (1)..(84)
<223>
      Xaa at residues 27, 32, 38, 39 and 41 is Glu or gamma-carboxy-Glu
       ; Xaa at residues 2, 5, 17, 23, 43, 45 and 58 is Pro or hydroxy-P
       ro; Xaa at residue 8 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr,
        O-sulpho-Tvr or O-phospho-Tvr
<400> 372
His Xaa Thr Lys Xaa Cys Met Xaa Cys Ser Phe Gly Gln Cys Val Gly
Xaa His Ile Cys Cys Gly Xaa Thr Gly Cys Xaa Met Gly Thr Ala Xaa
Ala Asn Met Cys Ser Xaa Xaa Asp Xaa Asp Xaa Ile Xaa Cys Gln Val
Phe Gly Ser Asp Cys Ala Leu Asn Asn Xaa Asp Asn Ile His Gly His
Cys Val Ala Asp Gly Ile Cys Cys Val Asp Asp Thr Cys Thr Thr His
Leu Gly Cys Leu
<210>
      373
<211>
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<212>
      DNA
<213> Conus tessulatus
<220>
<221>
      CDS
<222>
      (7)..(174)
<400> 373
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                                                                      48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
       1
gtt tcc ttc agt gca gat cgt gcc aac gtc aaa gcg tct gac ctg atc
                                                                      96
Val Ser Phe Ser Ala Asp Arg Ala Asn Val Lys Ala Ser Asp Leu Ile
                    20
gcc cag gcc acc aga gac ggc tgt cca cca cat ccc gtt cct ggc atg
Ala Gln Ala Thr Arg Asp Gly Cys Pro Pro His Pro Val Pro Gly Met
                                    40
cat aag tgc atg tgt act aat aca tgt ggt tgaagacgct gatgctccag
                                                                      194
His Lys Cys Met Cys Thr Asn Thr Cys Gly
gaccctctga accacgacct cgag
                                                                      218
<210> 374
<211>
      56
<212> PRT
<213> Conus tessulatus
<400> 374
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
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10
                                                      15
1
Phe Ser Ala Asp Arg Ala Asn Val Lys Ala Ser Asp Leu Ile Ala Gln
Ala Thr Arg Asp Gly Cys Pro Pro His Pro Val Pro Gly Met His Lys
Cys Met Cys Thr Asn Thr Cys Gly
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      375
<211>
      20
<212> PRT
<213> Conus tessulatus
<220>
<221>
     PEPTIDE
<222>
      (1)..(20)
      Xaa at residues 4, 5, 7 and 9 is Pro or hydroxy-Pro
<400> 375
Asp Gly Cys Xaa Xaa His Xaa Val Xaa Gly Met His Lys Cys Met Cys
Thr Asn Thr Cys
<210>
      376
<211>
      536
<212>
      DNA
     Conus geographus
<220>
<221> CDS
<222> (400)..(510)
<220>
<221>
      misc feature
<222>
      (1)..(536)
<223>
      n is unknown
<400> 376
anntagantn tgtcgtanta nnggatcnta antantgnnt cganatgatn angagtgata
                                                                   60
aatgannggt gcactnntan ttangntnnt angatnnnna tattatnnta nnnnntaana
                                                                   120
natatnogth nggannaaga agantaaaag tanngnttng tgaaanaang annnnatgtt
                                                                   180
nnanntcata acnnnaatgt aaataatana cgnnccagtg tgaaannntn tcnnnnataa
                                                                   240
aaattetntn tntnaangin nntgtntgng tgtgtgtgtg tgtgtgtgtg tgtgngtgtg
                                                                   300
                                                                   360
tgtgtgtgtg tgtgtgtgtn tgtggttctg ggtccagca tct gat gnc agg gat
                                                                   414
                                         Ser Asp Xaa Arg Asp
                                                                   462
qac aca qcc aaa gac gaa ggg tet nac atg gac aaa ttg gtc gag aaa
Asp Thr Ala Lys Asp Glu Gly Ser Xaa Met Asp Lys Leu Val Glu Lys
aaa qaa tqt tqc cat cct qcc tqt qqc aaa cac tac aqt tqt qqa cqc
Lys Glu Cys Cys His Pro Ala Cys Gly Lys His Tyr Ser Cys Gly Arg
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<212> PRT

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tgatgeteca gggtntgaag gancaa
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<210> 377
<211>
      37
<212> PRT
<213> Conus geographus
<400> 377
Ser Asp Xaa Arg Asp Asp Thr Ala Lys Asp Glu Gly Ser Xaa Met Asp
Lys Leu Val Glu Lys Lys Glu Cys Cys His Pro Ala Cys Gly Lys His
Tyr Ser Cys Gly Arg
        35
<210>
      378
<211>
       13
<212>
       PRT
<213>
      Conus geographus
<220>
<221>
       PEPTIDE
<222>
       (1)..(13)
<223>
       Xaa at residue 1 is Glu or gamma-carboxy-Glu; Xaa at residue 5 is
        Pro or hydroxy-Pro; Xaa at residue 11 is Tyr, 125I-Tyr, mono-iod
       o-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 378
Xaa Cys Cys His Xaa Ala Cys Gly Lys His Xaa Ser Cys
<210>
       379
<211>
       217
<212>
       DNA
<213> Conus geographus
<220>
<221> CDS
      (7)..(183)
<222>
<400> 379
                                                                       48
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       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
       1
                                                                       96
qtt tcc ttc cct tca gaa cgt gca tct gat ggc agg gat gac aca gcc
Val Ser Phe Pro Ser Glu Arg Ala Ser Asp Gly Arg Asp Asp Thr Ala
1.5
                    20
aaa gac gaa ggg tot gac atg gag aaa ttg gto gag aaa aaa gaa tgt
                                                                      144
Lys Asp Glu Gly Ser Asp Met Glu Lys Leu Val Glu Lys Lys Glu Cys
                                                                      193
tgc aat cct gcc tgt ggc aga cac ttc agt tgt gga cgc tgatgctcca
Cys Asn Pro Ala Cys Gly Arg His Phe Ser Cys Gly Arg
                                                                      217
ggaccctctg aaccacgact cgag
<210> 380
<211>
       59
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<213> Conus geographus
<400> 380
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
Phe Pro Ser Glu Arg Ala Ser Asp Gly Arg Asp Asp Thr Ala Lys Asp
Glu Gly Ser Asp Met Glu Lys Leu Val Glu Lys Lys Glu Cys Cys Asn
Pro Ala Cys Gly Arg His Phe Ser Cys Gly Arg
                         55
<210> 381
<211> 13
<212> PRT
<213> Conus geographus
<220>
      PEPTIDE
<221>
<222>
       (1)..(13)
       Xaa at residue 1 is Glu or gamma-carboxy-Glu; Xaa at residue 5 is
        Pro or hydroxy-Pro
<400> 381
Xaa Cys Cys Asn Xaa Ala Cys Gly Arg His Phe Ser Cys
<210>
       382
<211> 224
<212> DNA
<213> Conus striatus
<220>
<221> CDS
<222> (7)..(207)
                                                                          48
ggatee atg tte acc gtg ttt etg ttg gtt gte ttg gca acc act gte
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
                                                                          96
gtt tcc ttc act tca gat cgt gca tct gat ggc agg gat gac gaa gcc
Val Ser Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Asp Asp Glu Ala
15
aaa gac gaa agg tot gac atg cac gaa tog gac ogg aaa gga ogc gca
                                                                         144
Lys Asp Glu Arg Ser Asp Met His Glu Ser Asp Arg Lys Gly Arg Ala
                 35
tac tgt tgc cat cct gcc tgt ggc cca aac tat agt tgt ggc acc tca Tyr Cys Cys His Pro Ala Cys Gly Pro Asn Tyr Ser Cys Gly Thr Ser
                                                                         192
tgc tcc agg acc ctc tgaaccacga cctcgag
                                                                         224
Cys Ser Arg Thr Leu
         65
<210> 383
<211> 67
<212> PRT
<213> Conus striatus
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<400> 383
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Asp Asp Glu Ala Lys Asp
Glu Arg Ser Asp Met His Glu Ser Asp Arg Lys Gly Arg Ala Tyr Cys
Cys His Pro Ala Cys Gly Pro Asn Tyr Ser Cys Gly Thr Ser Cys Ser
Arg Thr Leu
<210> 384
<211> 22
<212>
      PRT
<213> Conus striatus
<220>
<221> PEPTIDE
<222>
       (1)..(22)
<223> Xaa at residues 6 and 10 is Pro or hydroxy-Pro; Xaa at residues 2
        and 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Ty
       r or O-phospho-Tyr
<400> 384
Ala Xaa Cys Cys His Xaa Ala Cys Gly Xaa Asn Xaa Ser Cys Gly Thr
Ser Cys Ser Arg Thr Leu
             20
<210>
       385
<211>
        224
<212> DNA
<213> Conus striatus
<220>
<221> CDS
<222>
      (7)..(189)
<400> 385
ggatec atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc
                                                                       48
        Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
gtt tee tte aet tea gat egt gea tet gat gge agg gat gae gaa gee
                                                                       96
Val Ser Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Asp Asp Glu Ala
aaa gac gaa agg tot gac atg cac gaa tog gac ogg aaa gga ogc gca
                                                                      144
Lys Asp Glu Arg Ser Asp Met His Glu Ser Asp Arg Lys Gly Arg Ala
tac tgt tgc cat cct gtc tgt ggc aaa aac ttt gat tgt gga cgc
                                                                      189
Tyr Cys Cys His Pro Val Cys Gly Lys Asn Phe Asp Cys Gly Arg
tgatgctcca ggaccctctg aaccacgacc tcgag
                                                                      224
<210> 386
<211> 61
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<211> 67 <212> PRT

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<212> PRT
<213> Conus striatus
<400> 386
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Asp Asp Glu Ala Lys Asp
Glu Arg Ser Asp Met His Glu Ser Asp Arg Lys Gly Arg Ala Tyr Cys
Cys His Pro Val Cys Gly Lys Asn Phe Asp Cys Gly Arg
                        55
<210> 387
<211> 14
<212>
      PRT
<213> Conus striatus
<220>
<221>
      PEPTIDE
<222>
      (1)..(14)
      Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at residue 2 is Tyr,
       125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-T
<400> 387
Ala Xaa Cys Cys His Xaa Val Cys Gly Lys Asn Phe Asp Cys
<210>
       388
<211>
      224
<212> DNA
<213> Conus rattus
<220>
<221> CDS
<222>
      (7)..(207)
<400> 388
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                                                                       48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
                                                                       96
gtt tcc ttc cct tca gat cgt gca tct gat ggc agg gat gac gaa gcc
Val Ser Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asp Asp Glu Ala
                    20
aaa gac gaa agg tot gac atg cac gaa tog gac ogg aat gga ogc gga
                                                                      144
Lys Asp Glu Arg Ser Asp Met His Glu Ser Asp Arg Asn Gly Arg Gly
                35
                                    40
tgc tgt tgc aat cct gcc tgt ggc cca aac tat ggt tgt ggc acc tca
                                                                      192
Cys Cys Cys Asn Pro Ala Cys Gly Pro Asn Tyr Gly Cys Gly Thr Ser
                                                                      224
tge tee agg ace etc tgaaccaega cetegag
Cys Ser Arg Thr Leu
        65
<210> 389
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<213> Conus rattus
<400> 389
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asp Asp Glu Ala Lys Asp
Glu Arg Ser Asp Met His Glu Ser Asp Arg Asn Gly Arg Gly Cys Cys
Cys Asn Pro Ala Cys Gly Pro Asn Tyr Gly Cys Gly Thr Ser Cys Ser
Arg Thr Leu
<210> 390
<211>
       22
<212>
       PRT
<213>
      Conus rattus
<220>
<221> PEPTIDE
<222> (1)..(22)
<223> Xaa at residues 6 and 10 is Pro or hydroxy-Pro; XXaa at residue 1
        2 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O
        -phospho-Tyr
<400> 390
Gly Cys Cys Cys Asn Xaa Ala Cys Gly Xaa Asn Xaa Gly Cys Gly Thr
Ser Cys Ser Arg Thr Leu
             20
<210> 391
<211>
       230
<212> DNA
<213> Conus arenatus
<220>
<221> CDS
<222> (7)..(195)
<400> 391
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                                                                          48
        Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
gat too tto act cca gtt cgt act tot gtt ggc agg agt gct gca gcc Asp Ser Phe Thr Pro Val Arg Thr Ser Val Gly Arg Ser Ala Ala Ala
                                                                          96
aac gog ttt gac ogg atc got ctg acc goc agg caa gat tat tgc tgt
                                                                         144
Asn Ala Phe Asp Arg Ile Ala Leu Thr Ala Arg Gln Asp Tyr Cys Cys
acc att ccc agc tgt tgg gat cgc tat aaa gag aga tgt aga cac ata
                                                                         192
Thr Ile Pro Ser Cys Trp Asp Arg Tyr Lys Glu Arg Cys Arg His Ile
                                                                         230
 ege tgatgeteca ggaccetetg aaccaegace ttgag
Arg
```

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<210> 392
<211>
       63
<212>
       PRT
<213>
      Conus arenatus
<400> 392
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Asp Ser
Phe Thr Pro Val Arg Thr Ser Val Gly Arg Ser Ala Ala Ala Asn Ala
Phe Asp Arg Ile Ala Leu Thr Ala Arg Gln Asp Tyr Cys Cys Thr Ile
Pro Ser Cys Trp Asp Arg Tyr Lys Glu Arg Cys Arg His Ile Arg
<210>
       393
<211>
       22
<212>
       PRT
<213>
      Conus arenatus
<220>
<221>
      PEPTIDE
<222>
       (1)..(22)
<223> Xaa at residue 1 is Gln or pyro-Gln; Xaa at residue 16 is Glu or
       gamma-carboxy-Glu; Xaa at residue 8 is Pro or hydroxy-Pro; Xaa at
        residue 11 is Trp (D or L) or bromo-Trp (D or L);
<220>
<221>
      PEPTIDE
<222>
      (1)..(22)
      Xaa at residues 3 and 14 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo
       -Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 393
Xaa Asp Xaa Cys Cys Thr Ile Xaa Ser Cys Xaa Asp Arg Xaa Lys Xaa
Arg Cys Arg His Ile Arg
<210>
       394
<211>
       230
<212>
      DNA
<213>
      Conus eburneus
<220>
<221>
      CDS
<222>
      (7)..(195)
<400> 394
ggatec atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtg
                                                                       48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
gat too tto act toa gtt ogt act too gtt gge agg agt gct gca gee
                                                                       96
Asp Ser Phe Thr Ser Val Arg Thr Ser Val Gly Arg Ser Ala Ala Ala
15
aac geg ttt gac egg ate get etg ace gee agg caa gat tat tge tgt
                                                                      144
Asn Ala Phe Asp Arg Ile Ala Leu Thr Ala Arg Gln Asp Tyr Cys Cys
```

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acc att ccc agc tgt tgg gat cgc tat aaa gag aga tgt aga cac ata
                                                                    192
Thr Ile Pro Ser Cys Trp Asp Arg Tyr Lys Glu Arg Cys Arg His Ile
                                                                      230
cgc tgatgctcca ggaccctctg aaccacgacc tcgag
Arq
<210> 395
<211>
       63
<212>
      PRT
<213> Conus eburneus
<400> 395
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Asp Ser
Phe Thr Ser Val Arg Thr Ser Val Gly Arg Ser Ala Ala Ala Asn Ala
Phe Asp Arg Ile Ala Leu Thr Ala Arg Gln Asp Tyr Cys Cys Thr Ile
Pro Ser Cys Trp Asp Arg Tyr Lys Glu Arg Cys Arg His Ile Arg
<210> 396
<211>
       22
<212>
      PRT
<213> Conus eburneus
<220>
<221>
      PEPTIDE
<222>
<223> Xaa at residue 1 is Gln or pyro-Gln; Xaa at residue 16 is Glu or
       gamma-carboxy-Glu; Xaa at residue 8 is Pro or hydroxy-Pro; Xaa at
        residue 11 is Trp (D or L) or bromo-Trp (D or L);
<220>
<221>
      PEPTIDE
<222>
       (1)..(22)
       Xaa at residues 3 and 14 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo
       -Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 396
Xaa Asp Xaa Cys Cys Thr Ile Xaa Ser Cys Xaa Asp Arg Xaa Lys Xaa
Arg Cys Arg His Ile Arg
            20
<210>
       397
       221
<211>
<212>
       DNA
<213> Conus miles
<220>
<221> CDS
       (7)..(177)
<400> 397
ggatco atg tto acc gtg ttt ctg ttg gtt gtc ttg gca act gct gtt
                                                                       48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Ala Val
ctt cca gtc act tta gat cgt gca tct gat gga agg aat gca gcc
                                                                       96
```

```
Leu Pro Val Thr Leu Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala
                    20
aac gcc aaa acg cct cgc ctg atc gcg cca ttc atc agg gat tat tgc
                                                                     144
Asn Ala Lys Thr Pro Arg Leu Ile Ala Pro Phe Ile Arg Asp Tyr Cys
tgt cat aga ggt ccc tgt atg gta tgg tgt ggt tgaagccgct gctgctccag
                                                                      197
Cys His Arg Gly Pro Cys Met Val Trp Cys Gly
gaccetetga accaegacet egag
                                                                      221
<210>
      398
<211>
      57
<212>
      PRT
<213> Conus miles
<400> 398
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Ala Val Leu Pro
Val Thr Leu Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala
Lys Thr Pro Arg Leu Ile Ala Pro Phe Ile Arg Asp Tyr Cys Cys His
Arg Gly Pro Cys Met Val Trp Cys Gly
    50
<210> 399
      13
<211>
<212>
      PRT
<213>
      Conus miles
<220>
<221>
       PEPTIDE
<222>
      (1)..(13)
<223>
      Xaa at residue 8 is Pro or hydroxy-Pro; Xaa at residue 12 is Trp
       (D or L) or bromo-Trp (D or L); Xaa at residue 2 is Tyr, 125I-Tyr
       , mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 399
Asp Xaa Cys Cys His Arg Gly Xaa Cys Met Val Xaa Cys
<210>
       400
       218
<211>
<212>
       DNA
<213> Conus iDedius
<220>
<221> CDS
<222> (7)..(174)
<400> 400
ggatcc atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc
                                                                       48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
       1
gtt tcc aac tct tca gat cgt ggt cca gca tct aat aaa agg aag aat
                                                                       96
Val Ser Asn Ser Ser Asp Arg Gly Pro Ala Ser Asn Lys Arg Lys Asn
```

```
gcc gca atg ctt gac atg atc gct caa cac gcc ata agg ggt tgc tgt
Ala Ala Met Leu Asp Met Ile Ala Gln His Ala Ile Arg Gly Cys Cys
                35
tcc gat cct cgc tgt aga tat aga tgt cgt tgaagacgct gctgctccag
                                                                      194
Ser Asp Pro Arg Cys Arg Tyr Arg Cys Arg
gaccctctga accacgacct cgag
                                                                      218
<210> 401
      56
<211>
<212> PRT
<213> Conus ¡Dedius
<400> 401
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
                                    10
Asn Ser Ser Asp Arg Gly Pro Ala Ser Asn Lys Arg Lys Asn Ala Ala
Met Leu Asp Met Ile Ala Gln His Ala Ile Arg Gly Cys Cys Ser Asp
Pro Arg Cys Arg Tyr Arg Cys Arg
<210> 402
<211> 13
<212> PRT
<213> Conus jDedius
<220>
<221> PEPTIDE
<222>
      (1)..(13)
      Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at residue 10 is Tyr,
       125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-T
       vr
<400> 402
Gly Cys Cys Ser Asp Xaa Arg Cys Arg Xaa Arg Cys Arg
<210> 403
<211> 17
<212> PRT
<213> Conus omaria
<220>
<221> PEPTIDE
      (1)..(17)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro
<400> 403
Gly Cys Cys Ser His Xaa Ala Cys Asn Val Asn Asn Xaa His Ile Cys
Gly
<210> 404
<211> 17
<212> PRT
<213> Conus omaria
<220>
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<221> PEPTIDE
<222>
      (1)..(17)
      Xaa at residues 6 and 13 is Pro or hydroxy-Pro; C terminus contai
      ns free hydroxyl
<400> 404
Gly Cys Cys Ser His Xaa Ala Cys Asn Val Asn Asn Xaa His Ile Cys
Gly
<210>
      405
<211>
      224
<212>
      DNA
<213> Conus quercinus
<220>
<221> CDS
<222>
      (7)..(189)
<400> 405
                                                                      48
ggatec atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
                                                                      96
act toa gat ogt gta tot aat ggo agg aaa got goa goo aaa tto aaa
Thr Ser Asp Arg Val Ser Asn Gly Arg Lys Ala Ala Ala Lys Phe Lys
geg cet gee etg atg gag etg tee gte agg caa gga tge tgt tea gat
                                                                     144
Ala Pro Ala Leu Met Glu Leu Ser Val Arg Gln Gly Cys Cys Ser Asp
                                                                     189
cet que tot que que aque aat cea que ate tot goe goa goa ege
Pro Ala Cys Ala Val Ser Asn Pro Asp Ile Cys Gly Gly Gly Arg
                                                                     224
tgatgctcca ggaccctctg aaccacgacc tcgag
<210> 406
<211> 61
<212> PRT
<213> Conus quercinus
<400> 406
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Thr Ser
Asp Arg Val Ser Asn Gly Arg Lys Ala Ala Ala Lys Phe Lys Ala Pro
Ala Leu Met Glu Leu Ser Val Arg Gln Gly Cys Cys Ser Asp Pro Ala
Cys Ala Val Ser Asn Pro Asp Ile Cys Gly Gly Gly Arg
<210> 407
<211>
       19
<212> PRT
<213> Conus quercinus
<220>
<221> PEPTIDE
<222> (1)..(19)
```

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<223> Xaa at residue 1 is Gln or pyro-Gln; Xaa at residues 7 and 14 is
       Pro or hydroxy-Pro
<400> 407
Xaa Gly Cys Cys Ser Asp Xaa Ala Cys Ala Val Ser Asn Xaa Asp Ile
Cvs Glv Glv
<210> 408
<211>
       230
<212>
       DNA
<213> Conus bandanus
<220>
<221> CDS
<222> (7)..(186)
<400> 408
ggatee atg tte ace gtg ttt etg ttg gtt gte ttg gea ace act gtt
                                                                      48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
qtt tcc ttc act tca aat cgt gca ttt cgt cgt agg aat gcc gta gcc
                                                                      96
Val Ser Phe Thr Ser Asn Arg Ala Phe Arg Arg Arg Asn Ala Val Ala
aaa gcg tet gae etg ate get etg aac gee agg aga eea gaa tge tgt
                                                                     144
Lys Ala Ser Asp Leu Ile Ala Leu Asn Ala Arg Arg Pro Glu Cys Cys
                35
act cat cct gcc tgt cac gtg agt cat cca gaa ctc tgt ggt
                                                                     186
Thr His Pro Ala Cys His Val Ser His Pro Glu Leu Cys Gly
            50
                                55
tgaagacgct gacgctccag gaccctctga accacgacct cgag
                                                                     230
<210> 409
<211> 60
<212> PRT
<213> Conus bandanus
<400> 409
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
Phe Thr Ser Asn Arg Ala Phe Arg Arg Arg Asn Ala Val Ala Lys Ala
Ser Asp Leu Ile Ala Leu Asn Ala Arg Arg Pro Glu Cys Cys Thr His
Pro Ala Cys His Val Ser His Pro Glu Leu Cys Gly
                        5.5
<210> 410
<211> 17
<212> PRT
<213> Conus bandanus
<220>
<221> PEPTIDE
<222>
       (1)..(17)
      Xaa at residues 2 and 15 is Glu or gamma-carboxy-Glu; Xaa at resi
       dues 1, 7 and 14 is Pro or hydroxy-Pro
```

```
<400> 410
Xaa Xaa Cys Cys Thr His Xaa Ala Cys His Val Ser His Xaa Xaa Leu
Cys
<210> 411
<211>
      242
<212> DNA
<213> Conus marmoreus
<220>
<221> CDS
<222> (7)..(198)
<400> 411
ggatee atg tte ace gtg ttt etg ttg gtt gte ttg gea ace act gtt
                                                                      48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
                                                                      96
gtt tee tte act tea aat egt gtt etg gat eea gea ttt egt egt agg
Val Ser Phe Thr Ser Asn Arg Val Leu Asp Pro Ala Phe Arg Arg Arg
aat qcc qca qcc aaa qcq tct qac ctq atc qct ctq aac qcc aqq aqa
                                                                     144
Asn Ala Ala Ala Lys Ala Ser Asp Leu Ile Ala Leu Asn Ala Arg Arg
cca gaa tgc tgt act cat cct gcc tgt cac gtg agt aat cca gaa ctc
                                                                     192
Pro Glu Cys Cys Thr His Pro Ala Cys His Val Ser Asn Pro Glu Leu
50 55 60
tgt ggc tgaagacgct gatgctccag gaccctctga accacgacct cgag
                                                                     242
Cys Gly
<210> 412
<211> 64
<212> PRT
<213> Conus marmoreus
<400> 412
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
Phe Thr Ser Asn Arg Val Leu Asp Pro Ala Phe Arg Arg Arg Asn Ala
Ala Ala Lys Ala Ser Asp Leu Ile Ala Leu Asn Ala Arg Arg Pro Glu
Cys Cys Thr His Pro Ala Cys His Val Ser Asn Pro Glu Leu Cys Gly
<210> 413
<211> 17
<212> PRT
<213> Conus marmoreus
<220>
<221> PEPTIDE
<222>
      (1)..(17)
<223> Xaa at residues 2 and 15 is Glu or gamma-carboxy-Glu; Xaa at resi
       dues 1, 7 and 14 is Pro or hydroxy-Pro
```

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<400> 413
Xaa Xaa Cys Cys Thr His Xaa Ala Cys His Val Ser Asn Xaa Xaa Leu
                                    10
Cys
<210>
      414
      218
<211>
<212>
      DNA
<213>
      Conus miles
<220>
<221> CDS
<222> (7)..(174)
<400> 414
agatee atq tte acc qtq ttt ctq ttq qtt qtc ttq qca acc act gtc
                                                                      48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
gtt tee gte act tea tat egt gea tet eat gge agg aag gae gea gee
                                                                      96
Val Ser Val Thr Ser Tyr Arg Ala Ser His Gly Arg Lys Asp Ala Ala
gac ctg age get ctg aac gac aac aat aat tgc tgt aac cat cct gcc
                                                                     144
Asp Leu Ser Ala Leu Asn Asp Asn Asn Asn Cys Cys Asn His Pro Ala
tgt gcc ggg aaa aat tca gat ctt tgt ggt tgaagacgct gctgctccag
                                                                     194
Cys Ala Gly Lys Asn Ser Asp Leu Cys Gly
                                                                      218
gaccetetga accacgacet egag
<210>
      415
<211>
       56
<212>
       PRT
<213> Conus miles
<400> 415
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
Val Thr Ser Tyr Arg Ala Ser His Gly Arg Lys Asp Ala Ala Asp Leu
Ser Ala Leu Asn Asp Asn Asn Cys Cys Asn His Pro Ala Cys Ala
Gly Lys Asn Ser Asp Leu Cys Gly
    50
<210> 416
<211> 15
<212> PRT
<213> Conus miles
<220>
<221>
       PEPTIDE
<222>
       (1)..(15)
<223> Xaa at residue 5 is Pro or hydroxy-Pro
<400> 416
Cys Cys Asn His Xaa Ala Cys Ala Gly Lys Asn Ser Asp Leu Cys
```

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<210> 417
<211>
       16
<212>
       PRT
<213> Conus magus
<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa at residue 11 is Glu or gamma-carboxy-Glu; Xaa at residue 6 i
       s Pro or hydroxy-Pro; Xaa at residue 4 is Tyr, 125I-Tyr, mono-iod
       o-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
<400> 417
Gly Cys Cys Xaa His Xaa Thr Cys His Leu Xaa His Ser Asn Leu Cys
<210>
       418
       224
<211>
<212>
       DNA
<213>
       Conus nobilis
<220>
<221> CDS
<222> (7)..(189)
<220>
<221> misc feature
<222>
       (1)..(224)
<223> n is unknown
<400> 418
ggatcc atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtt
                                                                       48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
gtt tcc ttc act tca gat cgt gca tct gat ggc agg aat gcc gca gcc
                                                                       96
Val Ser Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala
aaa get tet gae etg att get ttg ace gte agg gga tge tgt gag ega
                                                                      144
Lys Ala Ser Asp Leu Ile Ala Leu Thr Val Arg Gly Cys Cys Glu Arg
cct ccc tgt cgc tgg caa aat cca gat ctt tgt ggt gga agg cgc
                                                                      189
Pro Pro Cys Arg Trp Gln Asn Pro Asp Leu Cys Gly Gly Arg Arg
             50
tganattcca ggaccetetg aaccacgace tegag
                                                                      224
<210> 419
<211>
        61
<212>
       PRT
 <213> Conus nobilis
<400> 419
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
 Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Lys Ala
 Ser Asp Leu Ile Ala Leu Thr Val Arg Gly Cys Cys Glu Arg Pro Pro
                             40
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Cys Arg Trp Gln Asn Pro Asp Leu Cys Gly Gly Arg Arg
<210> 420
<211> 17
<212> PRT
<213> Conus nobilis
<220>
<221> PEPTIDE
<222>
       (1)..(17)
<223>
       Xaa at residue 4 is Glu or gamma-carboxy-Glu; Xaa at residues 6,
       7 and 13 is Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or L)
        or bromo-Trp (D or L)
<400> 420
Gly Cys Cys Xaa Arg Xaa Xaa Cys Arg Xaa Gln Asn Xaa Asp Leu Cys
                                    10
Gly
<210>
      421
<211>
      233
<212>
      DNA
<213> Conus atlanticus
<220>
<221> CDS
<222> (7)..(198)
<400> 421
ggatee atg tte acc gtg ttt ctg ttg gtt gtc ttg gca acc aca gtc
                                                                      48
      Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
gtt tee tte act tea gat agt gea ttt gat age agg aat gte gea gee
                                                                      96
Val Ser Phe Thr Ser Asp Ser Ala Phe Asp Ser Arg Asn Val Ala Ala
aac gac aaa gtg tot gac atg atc gct ctg acc gcc agg aga aca tgc
                                                                     144
Asn Asp Lys Val Ser Asp Met Ile Ala Leu Thr Ala Arg Arg Thr Cys
tgt tcc cgt cct acc tgt aga atg gaa tat cca gaa ctt tgt ggt gga
                                                                     192
Cys Ser Arg Pro Thr Cys Arg Met Glu Tyr Pro Glu Leu Cys Gly Gly
aga cgc tgatactcca ggaccctctg aaccacgacc tcgag
                                                                     233
Arg Arg
<210> 422
<211>
      64
<212> PRT
<213> Conus atlanticus
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
Phe Thr Ser Asp Ser Ala Phe Asp Ser Arg Asn Val Ala Ala Asn Asp
Lys Val Ser Asp Met Ile Ala Leu Thr Ala Arg Arg Thr Cys Cys Ser
```

40

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Arg Pro Thr Cys Arg Met Glu Tyr Pro Glu Leu Cys Gly Gly Arg Arg
                        55
<210> 423
<211> 17
<212> PRT
<213> Conus atlanticus
<220>
<221> PEPTIDE
<222> (1)..(17)
<223> Xaa at residues 11 and 14 is Glu or gamma-carboxy-Glu; Xaa at res
       idues 6 and 13 is Pro or hydroxy-Pro; Xaa at residue 12 is Tyr, 1
       25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
<400> 423
Thr Cys Cys Ser Arg Xaa Thr Cys Arg Met Xaa Xaa Xaa Xaa Leu Cys
Gly
<210> 424
<211>
      227
<212>
      DNA
<213>
      Conus guercinus
<220>
<221> CDS
<222> (7)..(192)
<220>
      misc_feature
<221>
      (1)..(227)
<222>
<223> n is unknown
<400> 424
ggatee atg tte ace gtg ttt etg ttg gtt gte ttg gea ate acg gtg
                                                                      48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Ile Thr Val
gtt tcc ttc acc tca gat cat gca tct gat ggc agg aat acc gca gcc
                                                                      96
Val Ser Phe Thr Ser Asp His Ala Ser Asp Gly Arg Asn Thr Ala Ala
                                                                     144
aac gac aaa geg tet aaa etg atg get ett acg aac gaa tge tgt gac
Asn Asp Lys Ala Ser Lys Leu Met Ala Leu Thr Asn Glu Cys Cys Asp
                                                                     192
aat cct ccq tgc aag tcq agt aat cca gat ttg tgt gac tgg aga agc
Asn Pro Pro Cys Lys Ser Ser Asn Pro Asp Leu Cys Asp Trp Arg Ser
tgatgeteca ggaccetntg aaccaegace tegag
                                                                      227
<210> 425
<211> 62
<212> PRT
<213> Conus quercinus
<400> 425
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Ile Thr Val Val Ser
                                    10
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Phe Thr Ser Asp His Ala Ser Asp Gly Arg Asn Thr Ala Ala Asn Asp
Lys Ala Ser Lys Leu Met Ala Leu Thr Asn Glu Cys Cys Asp Asn Pro
Pro Cys Lys Ser Ser Asn Pro Asp Leu Cys Asp Trp Arg Ser
<210> 426
<211> 21
<212> PRT
<213> Conus quercinus
<220>
<221> PEPTIDE
<222>
       (1)..(21)
       Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa at residues 7,
        8 and 14 is Pro or hydroxy-Pro; Xaa at residue 19 is Trp (D or L)
        or bromo-Trp (D or L)
<400> 426
Asn Xaa Cys Cys Asp Asn Xaa Xaa Cys Lys Ser Ser Asn Xaa Asp Leu
Cys Asp Xaa Arg Ser
             20
<210> 427
<211>
       221
<212>
       DNA
<213> Conus leopardus
<220>
<221> CDS
<222> (7)..(177)
<400> 427
ggatce atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acq gtc
                                                                          48
        Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
gtt toe etc act tta gat egt gca tot ggt gge agg aga tot gga gec
Val Ser Leu Thr Leu Asp Arg Ala Ser Gly Gly Arg Arg Ser Gly Ala
                                                                           96
gac aac atg att gct ctt ctg atc atc aga aaa tgc tgt tcc aat ccc
                                                                          144
Asp Asn Met Ile Ala Leu Leu Ile Ile Arg Lys Cys Cys Ser Asn Pro
gee tgt aac agg tat aat eea gea att tgt gat tgaagaeget aatgeteeag
                                                                          197
Ala Cys Asn Arg Tyr Asn Pro Ala Ile Cys Asp
gaccetetga accaegacet egag
                                                                          221
<210> 428
<211> 57
<212> PRT
<213> Conus leopardus
<400> 428
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
```

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Leu Thr Leu Asp Arg Ala Ser Gly Gly Arg Arg Ser Gly Ala Asp Asn
Met Ile Ala Leu Leu Ile Ile Arg Lys Cys Cys Ser Asn Pro Ala Cys
Asn Arg Tyr Asn Pro Ala Ile Cys Asp
<210> 429
<211> 16
<212> PRT
<213> Conus leopardus
<220>
<221> PEPTIDE
<222>
       (1)..(16)
      Xaa at residues 5 and 12 is Pro or hydroxy-Pro; Xaa at residue 10
        is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-
       phospho-Tyr
Cys Cys Ser Asn Xaa Ala Cys Asn Arg Xaa Asn Xaa Ala Ile Cys Asp
<210> 430
<211>
       224
<212>
      DNA
<213> Conus emaciatus
<220>
<221>
      CDS
<222> (7)..(180)
<400> 430
ggatee atg tte acc gtg ttt ctg ttg gtt ctc ttg gca acc act gte
                                                                      48
       Met Phe Thr Val Phe Leu Leu Val Leu Leu Ala Thr Thr Val
act tta cat cgt gca tct aat ggc agg aat gcc gca gcc agc agg aaa
                                                                      96
Thr Leu His Arg Ala Ser Asn Gly Arg Asn Ala Ala Ala Ser Arg Lys
gog tot god otg atd got dag atd god ggt aga gad tgd tgt aad ttt
                                                                     144
Ala Ser Ala Leu Ile Ala Gln Ile Ala Gly Arg Asp Cys Cys Asn Phe
ect get tgt gee geg agt aat eea gge ett tgt act tgaagaeget
                                                                     190
Pro Ala Cys Ala Ala Ser Asn Pro Gly Leu Cys Thr
gctgctccag gaccctctga accacgacct cgag
                                                                     224
<210> 431
<211>
      58
<212> PRT
<213> Conus emaciatus
<400> 431
Met Phe Thr Val Phe Leu Leu Val Leu Leu Ala Thr Thr Val Thr Leu
His Arg Ala Ser Asn Gly Arg Asn Ala Ala Ala Ser Arg Lys Ala Ser
```

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Ala Leu Ile Ala Gln Ile Ala Gly Arg Asp Cys Cys Asn Phe Pro Ala
Cys Ala Ala Ser Asn Pro Gly Leu Cys Thr
<210> 432
<211> 17
<212> PRT
<213> Conus emaciatus
<220>
<221> PEPTIDE
<222> (1)..(17)
<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro
<400> 432
Asp Cys Cys Asn Phe Xaa Ala Cys Ala Ala Ser Asn Xaa Gly Leu Cys
Thr
<210> 433
<211>
      215
<212>
      DNA
<213> Conus victor
<220>
<221>
      CDS
<222> (7)..(180)
<400> 433
ggatee atg tte acc gtg ttt ctg ttg gtt gtc ttg gca acc acc atc
                                                                      48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Ile
gtt toc toc act tta gat ogt gca tot gat ggc atg aat gct gca gcg
                                                                      96
Val Ser Ser Thr Leu Asp Arg Ala Ser Asp Gly Met Asn Ala Ala Ala
                                        25
tot gac ctg atc gct ctg agc atc agg aga tgc tgt tct tct cct ccc
                                                                     144
Ser Asp Leu Ile Ala Leu Ser Ile Arg Arg Cys Cys Ser Ser Pro Pro
tgt ttc gcg agt aat cca gct tgt gqt aga cqa cqc tgatqctcca
                                                                     190
Cys Phe Ala Ser Asn Pro Ala Cys Gly Arg Arg Arg
ggaccetetg aaccacgace tegag
                                                                     215
<210> 434
<211>
      58
<212> PRT
<213> Conus victor
<400> 434
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Ile Val Ser
Ser Thr Leu Asp Arg Ala Ser Asp Gly Met Asn Ala Ala Ala Ser Asp
Leu Ile Ala Leu Ser Ile Arg Arg Cys Cys Ser Ser Pro Pro Cys Phe
Ala Ser Asn Pro Ala Cys Gly Arg Arg Arg
```

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50
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<210> 435
<211> 14
<212> PRT
<213> Conus victor
<220>
<221> PEPTIDE
<222> (1)..(14)
<223> Xaa at residues 5, 6 and 13 is Pro or hydroxy-Pro
<400> 435
Cys Cys Ser Ser Xaa Xaa Cys Phe Ala Ser Asn Xaa Ala Cys
<210> 436
<211> 230
<212>
       DNA
<213> Conus cinereus gubba
<220>
<221> CDS
<222> (7)..(195)
<400> 436
ggatec atg ttc acc gtg ttt ctg ttg gtt gtc ctg gca acc act atc
                                                                          48
       Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Ile
gtt tee tee act tea ggt cat gea ttt gat gge agg aat get gea gee
                                                                          96
Val Ser Ser Thr Ser Gly His Ala Phe Asp Gly Arg Asn Ala Ala Ala
gac tac aaa ggg tct gaa ttg ctt gct atg acc gtc agg gga tgc Asp Tyr Lys Gly Ser Glu Leu Leu Ala Met Thr Val Arg Gly Gly Cys
                                                                         144
tgt tcc ttt cct ccc tgt atc gca aat aat cct ttt tgt gct gga aga
                                                                         192
Cys Ser Phe Pro Pro Cys Ile Ala Asn Asn Pro Phe Cys Ala Gly Arg
ege tgatgeteca ggaceetetg aaccacgace tegag
                                                                         230
Arq
<210> 437
<211> 63
<212> PRT
<213> Conus cinereus gubba
<400> 437
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Ile Val Ser
Ser Thr Ser Gly His Ala Phe Asp Gly Arg Asn Ala Ala Ala Asp Tyr
Lys Gly Ser Glu Leu Leu Ala Met Thr Val Arg Gly Gly Cys Cys Ser
Phe Pro Pro Cys Ile Ala Asn Asn Pro Phe Cys Ala Gly Arg Arg
<210> 438
<211> 17
```

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<212> PRT
<213> Conus cinereus gubba
<220>
<221>
      PEPTIDE
<222>
      (1)..(17)
      Xaa at residues 7, 8 and 14 is Pro or hydroxy-Pro
<400> 438
Gly Gly Cys Cys Ser Phe Xaa Xaa Cys Ile Ala Asn Asn Xaa Phe Cys
                                     10
Ala
<210> 439
<211> 221
<212> DNA
<213> Conus flavidus
<220>
<221> CDS
<222> (7)..(177)
<400> 439
ggatee atg tte acc gtg ttt etg ttg gtt gte tte gea tee tet gte
                                                                         48
       Met Phe Thr Val Phe Leu Leu Val Val Phe Ala Ser Ser Val
act tta gat cgt gca tct cat ggc agg tat atc cca gtc gtc gac aga
                                                                         96
Thr Leu Asp Arg Ala Ser His Gly Arg Tyr Ile Pro Val Val Asp Arg
                     20
                                         2.5
gcg tct gcc ctg atg gct cag gcc gac ctt aga ggt tgc tgt tcc aat
                                                                        144
Ala Ser Ala Leu Met Ala Gln Ala Asp Leu Arg Gly Cys Cys Ser Asn
                35
cct cct tgt tcc tat ctt aat cca gcc tgt ggt taaagacgct gccgctccag
Pro Pro Cys Ser Tyr Leu Asn Pro Ala Cys Gly
                                                                        197
gaccctctga accacgacct cgag
                                                                        221
<210> 440
<211> 57
<212> PRT
<213> Conus flavidus
<400> 440
Met Phe Thr Val Phe Leu Leu Val Val Phe Ala Ser Ser Val Thr Leu
Asp Arg Ala Ser His Gly Arg Tyr Ile Pro Val Val Asp Arg Ala Ser
Ala Leu Met Ala Gln Ala Asp Leu Arg Gly Cys Cys Ser Asn Pro Pro
Cys Ser Tyr Leu Asn Pro Ala Cys Gly
    50
<210> 441
<211> 15
       PRT
<212>
<213> Conus flavidus
<220>
```

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<221> PEPTIDE
<222>
       (1)..(15)
<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro; Xaa at residue
        10 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or
        O-phospho-Tyr
<400> 441
Gly Cys Cys Ser Asn Xaa Xaa Cys Ser Xaa Leu Asn Xaa Ala Cys
<210> 442
<211> 221
<212> DNA
<213> Conus emaciatus
<220>
<221> CDS
<222> (7)..(177)
<400> 442
ggatcc atg ttc acc gtg ttt ctg ttg gtt gtc ttc gca tcc tct gtc
Met Phe Thr Val Phe Leu Leu Val Val Phe Ala Ser Ser Val
                                                                         48
act tta gat cgt gca tct cat ggc agg tat gcc gca gtc gtc aac aga
                                                                         96
Thr Leu Asp Arg Ala Ser His Gly Arg Tyr Ala Ala Val Val Asn Arg
geg tot ged etg atg get cat ged ged ett ega gat tge tgt ted gat
                                                                        144
Ala Ser Ala Leu Met Ala His Ala Ala Leu Arg Asp Cys Cys Ser Asp
                 35
cct cct tgt gct cat aat aat cca gac tgt cgt taaagacget gctgctccag
                                                                        197
Pro Pro Cys Ala His Asn Asn Pro Asp Cys Arg
            50
gaccctctga accacgacct cgag
                                                                         221
<210> 443
<211> 57
<212> PRT
<213> Conus emaciatus
Met Phe Thr Val Phe Leu Leu Val Val Phe Ala Ser Ser Val Thr Leu
Asp Arg Ala Ser His Gly Arg Tyr Ala Ala Val Val Asn Arg Ala Ser
Ala Leu Met Ala His Ala Ala Leu Arg Asp Cys Cys Ser Asp Pro Pro
Cys Ala His Asn Asn Pro Asp Cys Arg
<210> 444
<211> 16
<212> PRT
<213> Conus emaciatus
<220>
<221> PEPTIDE
<222>
       (1)..(16)
<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro
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```
<400> 444
Asp Cys Cys Ser Asp Xaa Xaa Cys Ala His Asn Asn Xaa Asp Cys Arg
<210>
      445
<211>
      230
<212>
      DNA
<213>
      Conus generalis
<220>
<221> CDS
<222> (7)..(195)
<400> 445
ggatee atg tte ace gtg ttt etg ttg gtt gte ttg gea act act gte
                                                                       48
      Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val
gtt tee tte act tea gat egt ggg tet gat gge agg aat gee gea gee
                                                                      96
Val Ser Phe Thr Ser Asp Arg Gly Ser Asp Gly Arg Asn Ala Ala Ala
15
aag gac aaa gcg tet gac etg gte get etg ace gte aag gga tge tgt
                                                                      144
Lys Asp Lys Ala Ser Asp Leu Val Ala Leu Thr Val Lys Gly Cys Cys
tot aat oot ooc tgt tac gog aat aat caa goc tat tgt aat gga aga
                                                                     192
Ser Asn Pro Pro Cys Tyr Ala Asn Asn Gln Ala Tyr Cys Asn Gly Arg
cgc tgatgeteca ggaccetetg aaccacgace tegag
                                                                      230
Arg
<210> 446
      63
<211>
<212>
      PRT
<213> Conus generalis
<400> 446
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser
Phe Thr Ser Asp Arg Gly Ser Asp Gly Arg Asn Ala Ala Ala Lys Asp
Lys Ala Ser Asp Leu Val Ala Leu Thr Val Lys Gly Cys Cys Ser Asn
Pro Pro Cys Tyr Ala Asn Asn Gln Ala Tyr Cys Asn Gly Arg Arg
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<212> PRT
<213> Conus generalis
<220>
<221>
       PEPTIDE
<222>
       (1)..(17)
      Xaa at residues 6 and 7 is Pro or hydroxy-Pro; Xaa at residues 9
       and 15 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr
        or O-phospho-Tyr
<400> 447
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Gly Cys Cys Ser Asn Xaa Xaa Cys Xaa Ala Asn Asn Gln Ala Xaa Cys

<222> (1)..(25)

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Asn			
<210> 448 <211> 212 <212> DNA <213> Conus wittigi			
<220> <221> CDS <222> (7)(195)			
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gtt tcc ccc act ag Val Ser Pro Thr Ar 15			
aca agc ttt cag ac Thr Ser Phe Gln Th 35	r Leu Thr His As		
tgt tgg aag gcc ga Cys Trp Lys Ala Gl 50			
ctc tgaaccacga cctcgag 212 Leu			
<210> 449 <211> 63 <212> PRT <213> Conus wittigi			
<400> 449 Met Phe Thr Val Ph 1 5	e Leu Leu Val Va	l Leu Ala Thr Thr 10	Val Val Ser 15
Pro Thr Arg Asp Ar 20	g Ala Ser Gly Va 25	l Arg Asn Val Val	Ala Thr Ser 30
Phe Gln Thr Leu Th	r His Asp Glu Cy 40	s Cys Ala His Pro 45	Ser Cys Trp
Lys Ala Glu Asp Le 50	u Ile Cys Thr As 55	n Gln Arg Arg Arg 60	Thr Leu
<210> 450 <211> 25			
<212> PRT			
<213> Conus wittigi			
<220>			
<221> PEPTIDE			

<210> 453 <211> 20 <212> PRT

<223> Xaa at residues 2 and 13 is Glu or gamma-carboxy-Glu; Xaa at resi due 7 is Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or L) or bromo-Trp (D or L) <400> 450 Asp Xaa Cys Cys Ala His Xaa Ser Cys Xaa Lys Ala Xaa Asp Leu Ile Cys Thr Asn Gln Arg Arg Arg Thr Leu 20 <210> 451 <211> 230 <212> DNA <213> Conus caracteristicus <220> <221> CDS <222> (7)..(195) <400> 451 ggatee atg tte ace gtg ttt etg ttg gtt gte ttg gea ace act gte 48 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val 96 gtt tee tte act tea gat egt geg tet gaa gge agg aat get gea gee Val Ser Phe Thr Ser Asp Arg Ala Ser Glu Gly Arg Asn Ala Ala Ala aag gac aaa gcg tct gac ctg gtg gct ctg aga gtc agg gga tgc tgt 144 Lys Asp Lys Ala Ser Asp Leu Val Ala Leu Arg Val Arg Gly Cys Cys 35 192 gee att egt gaa tgt ege ttg eag aat gea geg tat tgt ggt gga ata Ala Ile Arg Glu Cys Arg Leu Gln Asn Ala Ala Tyr Cys Gly Gly Ile 230 tcc tgatgeteca ggaccetetg aaccacgace tegag <210> 452 <211> 63 <212> PRT <213> Conus característicus <400> 452 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser Phe Thr Ser Asp Arg Ala Ser Glu Gly Arg Asn Ala Ala Ala Lys Asp Lys Ala Ser Asp Leu Val Ala Leu Arg Val Arg Gly Cys Cys Ala Ile Arg Glu Cys Arg Leu Gln Asn Ala Ala Tyr Cys Gly Gly Ile Ser

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<213> Conus caracteristicus
<220>
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<222> (1)..(20)
<223> Xaa at residue 7 is Glu or gamma-carboxy-Glu; Xaa at residue 15 i
       s Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-ph
       ospho-Tyr
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Gly Cys Cys Ala Ile Arg Xaa Cys Arg Leu Gln Asn Ala Ala Xaa Cys
Gly Gly Ile Ser
<210>
      454
<211>
       568
      DNA
<212>
<213> Conus betulinus
<220>
<221> CDS
<222> (395)..(508)
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<221> misc_feature
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       (1)..(568)
<223> n is unknown
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                                                                  120
qaqanagtga atagnagnta agtagannaa ganaggtaga nagnanangn ggangntagn
                                                                  180
taataqatan nntatngaga nattantagc ngtatanana agaaaagagg gnaanngaaa
tgnngnaann ataantanta nngatngann ngnaagtgnn aagngtanaa ggaanaacaa
                                                                   240
                                                                   300
 antngttgtn taatntgnnt gngtgtgtnt gtgtgngtgt gtgtgtgtgn gtgngtgtgt
                                                                   360
qtqtqtqtq qnqtqtqtqq ttctqqatcc agca tct ggt ggc agg aag gct gca
                                                                   415
                                     Ser Gly Gly Arg Lys Ala Ala
 gcc aaa gcg tot aac cgg atc gct ctg acc gtc agg agt gca aca tgc
                                                                   463
 Ala Lys Ala Ser Asn Arg Ile Ala Leu Thr Val Arg Ser Ala Thr Cys
                                                                   508
 tgt tat tat cct ccc tgt tac gag gct tat cca gaa agt tgt ctg
Cys Tyr Tyr Pro Pro Cys Tyr Glu Ala Tyr Pro Glu Ser Cys Leu
25 30 35
 taacgtgaat catccagacc tttgtggctg aagaccctga tgctccaggg gcaagttcaa
                                                                   568
 <210> 455
 <211> 38
 <212> PRT
 <213> Conus betulinus
 <400> 455
 Ser Gly Gly Arg Lys Ala Ala Ala Lys Ala Ser Asn Arg Ile Ala Leu
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Tyr Pro Glu Ser Cys Leu
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<213>
      Conus betulinus
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      PEPTIDE
<222>
      (1)..(19)
     Xaa at residues 12 and 16 is Glu or gamma-carboxy-Glu; Xaa at res
       idues 8, 9 and 13 is Pro or hydroxy-Pro; Xaa at residues 6, 7, 11
       and 14 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Ty
       r or O-phospho-Tyr
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Ser Ala Thr Cys Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Ala Xaa Xaa Xaa
Ser Cys Leu
<210>
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<211>
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       PRT
<213>
      Conus textile
<400> 457
Asp Cys Arg Gly Tyr Asp Ala Pro Cys Ser Ser Gly Ala Pro Cys Cys
Asp Trp Trp Thr Cys Ser Ala Arg Thr Asn Arg Cys Phe
<210>
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<211>
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<212> PRT
<213> Conus ammiralis
<400> 458
Gly Met Trp Gly Asp Cys Lys Asp Gly Leu Thr Thr Cys Phe Ala Pro
Ser Glu Cys Cys Ser Glu Asp Cys Glu Gly Ser Cys Thr Met Trp
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      Conus ammiralis
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Gln Gln Cys Cys Thr Asp Val Cys Tyr Lys Arg Asp Tyr Cys Ala Leu
Trp Asp Asp Arg
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<213> Conus ammiralis
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Ser Trp Asp Cys Asp Val Val Cys Ser
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Trp Trp Arg Trp Gly Gly Cys Met Ala Trp Phe Gly Lys Cys Ser Lys
Asp Ser Glu Cys Cys Ser Asn Ser Cys Asp Ile Thr Arg Cys Glu Leu
Met Arg Phe Pro Pro Asp Trp
<210> 462
<211> 29
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<400> 462
Asp Cys Arg Gly Tyr Asp Ala Pro Cys Ser Ser Gly Ala Pro Cys Cys
Asp Trp Trp Thr Cys Ser Ala Arg Thr Gly Arg Cys Phe
<210> 463
<211> 26
<212> PRT
<213> Conus ammiralis
<400> 463
Leu Cys Pro Asp Tyr Thr Glu Pro Cys Ser His Ala His Glu Cys Cys
Ser Trp Asn Cys His Asn Gly His Cys Thr
<210> 464
<211>
       27
<212> PRT
<213> Conus ammiralis
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Cys Ser Ser Trp Ala Lys Tyr Cys Glu Val Asp Ser Glu Cys Cys Ser
Glu Gln Cys Val Arg Ser Tyr Cys Ala Met Trp
<210> 465
<211> 32
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<212> PRT
<213> Conus pennaceus
<220>
<221> PEPTIDE
<222>
       (1)..(32)
      Xaa at residues 14 and 26 is gamma-carboxy-Glu; Xaa at residue 31
        is hydroxy-Pro
<400> 465
Asp Cys Thr Ser Trp Phe Gly Arg Cys Thr Val Asn Ser Xaa Cys Cys
Ser Asn Ser Cys Asp Gln Thr Tyr Cys Xaa Leu Tyr Ala Phe Xaa Ser
<210> 466
<211> 32
<212> PRT
<213> Conus gloriamaris
<400> 466
Glu Cys Arg Ala Trp Tyr Ala Pro Cys Ser Pro Gly Ala Gln Cys Cys
Ser Leu Leu Met Cys Ser Lys Ala Thr Ser Arg Cys Ile Leu Ala Leu
<210> 467
<211> 27
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<213> Conus textile
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<221> PEPTIDE
<222>
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<400> 467
Cys Lys Thr Tyr Ser Lys Tyr Cys Xaa Ala Asp Ser Xaa Cys Cys Thr
Xaa Gln Cys Val Arg Ser Tyr Cys Thr Leu Phe
<210> 468
<211> 29
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<222> (1)..(29)
<223> Xaa is gamma-carboxy-Glu
<400> 468
Asn Gly Gln Cys Glu Asp Val Trp Met Pro Cys Thr Ser Asn Trp Xaa
Cys Cys Ser Leu Asp Cys Glu Met Tyr Cys Thr Gln Ile
<210> 469
<211> 27
<212> PRT
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<213> Conus marmoreus
<220>
<221>
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<222>
      (1)..(27)
<223> Xaa is gamma-carboxy-Glu
<400> 469
Cys Gly Gly Trp Ser Thr Tyr Cys Glu Val Asp Glu Xaa Cys Cys Ser
Glu Ser Cys Val Arg Ser Tyr Cys Thr Leu Phe
<210> 470
<211> 26
<212> PRT
<213> Conus marmoreus
<220>
<221>
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<222>
      (1)..(26)
<223>
     Xaa is gamma-carboxy-Glu
<400> 470
Asn Gly Gly Cys Lys Ala Thr Trp Met Ser Cys Ser Ser Gly Trp Xaa
Cys Cys Ser Met Ser Cys Asp Met Tyr Cys
<210>
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<211>
      33
<212>
      PRT
<213> Conus radiatus
<220>
<221> PEPTIDE
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<223> Xaa at residues 1, 10 and 33 is bromo-Trp; Xaa at residues 5, 6,
       15 and 26 is gamma-carboxy-Glu
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Xaa Phe Gly His Xaa Xaa Cys Thr Tyr Xaa Leu Gly Pro Cys Xaa Val
Asp Asp Thr Cys Cys Ser Ala Ser Cys Xaa Ser Lys Phe Cys Gly Leu
Xaa
<210> 472
<211>
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<212>
      PRT
<213> Conus radiatus
<400> 472
Trp Trp Glu Gly Glu Cys Ser Asn Trp Leu Gly Ser Cys Ser Thr Pro
Ser Asn Cys Cys Leu Lys Ser Cys Asn Gly His Cys Thr Leu Trp
<210> 473
<211> 26
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  <213> Conus textile
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 <221>
       PEPTIDE
  <222>
        (1)..(26)
  <223> Xaa at residues 3 and 8 is hydroxy-Pro; Xaa at residues 7 and 14
         is gamma-carboxy-Glu
  <400> 473
  Leu Cys Xaa Asp Tyr Thr Xaa Xaa Cys Ser His Ala His Xaa Cys Cys
  Ser Trp Asn Cys Tyr Asn Gly His Cys Thr
 <210> 474
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        PRT
 <213> Conus textile
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 Asp Cys Tyr Ser Trp Leu Gly Ser Cys Ile Ala Pro Ser Gln Cys Cys
 Ser Glu Val Cys Asp Tyr Tyr Cys Arg Leu Trp Arg
 <210> 475
<211> 34
<212> PRT
 <213> Conus textile
 <220>
 <221>
        PEPTIDE
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 <223> Xaa is gamma-carboxy-Glu
 <400> 475
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 Cys Cys Ser Asn Ser Cys Asp Gln Thr Tyr Cys Thr Leu Met Pro Pro
  Asp Trp
  <210> 476
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  <213> Conus textile
  <220>
  <221> PEPTIDE
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  <223> Xaa is gamma-carboxy-Glu
  <400> 476
  Gly Met Trp Gly Glu Cys Lys Asp Gly Leu Thr Thr Cys Leu Ala Pro
  Ser Xaa Cys Cys Ser Glu Asp Cys Glu Gly Ser Cys Thr Met Trp
  <210> 477
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<213> Conus textile
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<223> Xaa is gamma-carboxy-Glu
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Ala Xaa Cys Cys Ser Gly Asp Cys His Glu Thr Cys Ile Phe Gly Trp
Glu Val
<210>
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<213> Conus textile
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      (1)..(39)
<223> Xaa is gamma-carboxy-Glu
<400> 478
Trp Trp Arg Trp Gly Gly Cys Met Ala Trp Phe Gly Leu Cys Ser Arg
Asp Ser Xaa Cys Cys Ser Asn Ser Cys Asp Val Thr Arg Cys Glu Leu
Met Pro Phe Pro Pro Asp Trp
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<210> 479
<211> 27
<212> PRT
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<220>
<221>
      PEPTIDE
<222>
      (1)..(27)
<223> Xaa is gamma-carboxy-Glu
<400> 479
Cys Gly Gly Tyr Ser Thr Tyr Cys Xaa Val Asp Ser Xaa Cys Cys Ser
Asp Asn Cys Val Arg Ser Tyr Cys Thr Leu Phe
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<213> Conus caracteristicus
<400> 480
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Thr Cys Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His
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173 20 25 30 His Phe Tyr Arg Gly Cys Thr Cys Ser Cys Gln <210> 481 <211> 42 <212> PRT <213> Conus caracteristicus <400> 481 Gly Cys Ser Gly Thr Cys His Arg Arg Glu Asp Gly Lys Cys Arg Gly Thr Cys Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His 20 His Phe Tyr Arg Gly Cys Thr Cys Thr Cys <210> 482 <211> 42 <212> PRT <213> Conus caracteristicus <400> 482 Gly Cys Ser Gly Thr Cys Arg Arg His Arg Asp Gly Lys Cys Arg Gly Thr Cys Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His $20 \hspace{0.5cm} 25 \hspace{0.5cm} 30$ His Phe Tyr Arg Gly Cys Thr Cys Thr Cys 35 <210> 483 <211> 42 <212> PRT <213> Conus caracteristicus <400> 483 Gly Cys Ser Gly Thr Cys Arg Arg His Arg Asp Gly Lys Cys Arg Gly Thr Cys Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His His Phe Tyr Arg Gly Cys Thr Cys Thr Cys 35 <210> 484 <211> 42 <212> PRT <213> Conus caracteristicus <400> 484 Gly Cys Ser Gly Thr Cys His Arg Arg Glu Asp Gly Lys Cys Arg Gly Thr Cys Asp Cys Ser Gly Tyr Ser Tyr Cys Arg Cys Gly Asp Ala His

His Phe Tyr Arg Gly Cys Thr Cys Thr Cys 35 40

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<213> Conus caracteristicus
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Thr Cys Asp Cys Asp Gly His Asp His Cys Asp Cys Gly Asp Thr Leu
Gly Thr Tyr Ser Gly Cys Val Cys Ile Cys
<210>
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<211>
      45
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<213>
      Conus lacterculatus
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Gln Ser Glu Thr Ala Cys Arg Ser Leu Gly Ser Tyr Gln Cys Met Gly
Lys Cys Gln Leu Gly Val His Ser Trp Cys Glu Cys Ile Tyr Asn Arg
Gly Ser Gln Lys Ser Gly Cys Ala Cys Arg Cys Gln Lys
<210>
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<211>
       48
<212>
      PRT
<213>
      Conus monachus
<400> 487
Gln Cys Thr Leu Val Asn Asn Cys Asp Arg Asn Gly Glu Arg Ala Cys
Asn Gly Asp Cys Ser Cys Glu Gly Gln Ile Cys Lys Cys Gly Tyr Arg
Val Ser Pro Gly Lys Ser Gly Cys Ala Cys Thr Cys Arg Asn Ala Lys
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<211>
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<212> PRT
<213> Conus purpurascens
<400> 488
Gly Cys Ser Gly Ser Pro Cys Phe Lys Asn Lys Thr Cys Arg Asp Glu
Cys Ile Cys Gly Gly Leu Ser Asn Cys Trp Cys Gly Tyr Gly Gly Ser 25 30
Arg Gly Cys Lys Cys Thr Cys Arg Glu
<210>
      489
<211>
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<212>
      PRT
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Glu Ser Cys Ser Cys Glu Gly Leu His Ser Cys Arg Cys Thr Tyr Asn
Ile Gly Ser Met Lys Ser Gly Cys Ala Cys Ile Cys Thr Tyr Tyr 35 40 45
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Tyr Gly Leu Gly Cys Ala Gly Thr Cys Gly Ser Ser Ser Asn Cys Val
Arg Asp Tyr Cys Asp Cys Pro Lys Pro Asn Cys Tyr Cys Thr Gly Lys
Gly Phe Arg Gln Pro Gly Cys Gly Cys Ser Cys Leu
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<211>
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<213> Conus striolatus
<400> 491
Gln Cys Thr Phe Val Asn Asn Cys Gln Gln Asn Gly Cys Ala Asn Gly
Asp Cys Ser Cys Gly Asp Gln Ile Cys Lys Cys Gly Tyr Arg Ile Ser 20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}
Pro Gly Arg Ser Gly Cys Ala Cys Thr Cys Arg Asn Ala Lys
<210> 492
<211>
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<212>
       PRT
<213> Conus tulipa
<400> 492
Phe Gly Pro Ile Cys Thr Cys Phe Lys Ser Gln Asn Cys Arg Gly Ser 1 5 10 15
Cys Glu Cys Met Ser Pro Pro Gly Cys Tyr Cys Ser Asn Asn Gly Ile
Arg Glu Arg Gly Cys Ser Cys Thr Cys Pro Gly Thr
<210>
       493
<211>
       46
<212>
       PRT
<213>
       Conus tulipa
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Gly Cys Thr Gly Asn Cys Asp Trp Thr Cys Ser Gly Asp Cys Ser Cys 1 	 5 	 10 	 15
Gln Gly Thr Ser Asp Ser Cys His Cys Ile Pro Pro Lys Ser Ile Gly
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Asn Arg Cys Arg Cys Gln Cys Lys Arg Lys Ile Glu Ile Asp
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 <211> 15
 <212> PRT
 <213> Conus textile
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 Glu Cys Cys Glu Asp Gly Trp Cys Cys Thr Ala Ala Pro Leu Thr
 <210> 495
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 <400> 495
 Gly Cys Cys Glu Asp Gly Trp Cys Cys Thr Ala Ala Pro Leu Thr
 <210> 496
 <211> 20
 <212> PRT
<213> Conus marmoreus
 <400> 496
 Asn Gly Cys Cys Arg Ala Gly Asp Cys Cys Ser Arg Phe Glu Ile Lys
 Glu Asn Asp Phe
 <210> 497
 <211> 11
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 <213> Conus marmoreus
 <400> 497
 Asn Gly Cys Cys Arg Ala Gly Asp Cys Cys Ser
 <210> 498
 <211> 10
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 Asn Ala Cys Cys Ile Val Arg Gln Cys Cys
 <210> 499
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 <213> Conus quercinus
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 Gly Cys Cys Ala Arg Leu Thr Cys Cys Val
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Gly Cys Cys Pro Lys Gln Met Arg Cys Cys Thr Leu
<210> 502
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Cys Cys Pro Arg Arg Leu Ala Cys Cys Ile Ile
<210> 503
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<400> 503
Cys Cys Pro Asn Lys Pro Cys Cys Phe Ile
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<213> Conus geographus
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Glx Gly Trp Cys Cys Lys Glu Asn Ile Ala Cys Cys Ile
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Glx Gly Trp Cys Cys Lys Glu Asn Ile Ala Cys Cys Val
<210> 506
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<213> Conus imperialis
<400> 506
Asp Trp Asn Ser Cys Cys Gly Lys Asn Pro Gly Cys Cys Pro Trp
<210> 507
<211> 11
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<213> Conus betulinus
<400> 507
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Asn Cys Cys Pro Asp Ser Pro Pro Cys Cys His
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       12
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<400> 508
Gly Asn Cys Cys Glu Phe Trp Glu Phe Cys Cys Asp
<210> 509
<211> 9
<212> PRT
<213> Conus dalli
<400> 509
Cys Cys Glu Tyr Trp Lys Leu Cys Cys
<210> 510
<211> 11
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<213> Conus omaria
<400> 510
Val Cys Cys Gly Tyr Lys Phe Phe Cys Cys Arg
<210>
      511
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<213> Conus aulicus
<400> 511
Phe Cys Cys Pro Val Ile Arg Tyr Cys Cys Trp
<210> 512
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Phe Cys Cys Pro Phe Ile Arg Tyr Cys Cys Trp
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Cys Cys Pro Met Ile Tyr Trp Cys Cys Ser
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Cys Cys Pro Glu Ile Tyr Trp Cys Cys Ser
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Ile Cys Cys Pro Ile Ile Leu Trp Cys Cys
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<400> 516
Cys Cys Pro Pro Val Ile Trp Cys Cys
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Trp Asn Asn Tyr Cys Cys Thr Asn Glu Leu Trp Cys Cys
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<212> PRT
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<400> 519
Leu Cys Cys Val Thr Glu Asp Trp Cys Cys Glu Trp Trp
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Val Cys Cys Arg Pro Val Gln Asp Cys Cys Ser
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<213> Conus dalli
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Pro Val Asn Cys Cys Pro Ile Asp Gln Ser Cys Cys Ser
<210> 522
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    Ser
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F= <210> 524
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    <400> 524
    Ala Cys Cys Gly Tyr Lys Leu Cys Ser Pro Cys
    <210> 525
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   <400> 525
Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Pro Cys Arg
    <210> 526
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    <210> 527
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    <400> 527
     Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Pro Cys
     <210> 528
    <211> 12
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<213> Conus episcopatus
     <400> 528
     Ser Thr Cys Cys Gly Tyr Arg Met Cys Val Pro Cys
     <210> 529
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<212> PRT
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<400> 529
Asn Gly Val Cys Cys Gly Tyr Lys Leu Cys Leu Pro Cys
<210> 530
<211> 12
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Leu Cys Cys Gly Phe Trp Met Cys Ile Pro Cys Asn
<210> 531
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       13
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<213> Conus marmoreus
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<222> (1)..(13)
<223> Xaa is hydroxy-Pro
<400> 531
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<210> 532
<211> 12
<212> PRT
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<220>
<221>
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       (1)..(12)
<223> Xaa is hydroxy-Pro
<400> 532
Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys
<210> 533
<211> 11
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Ala Cys Cys Gly Tyr Lys Leu Cys Ser Pro Cys
<210> 534
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<213> Conus aulicus
<400> 534
Ser Val Cys Cys Gly Tyr Lys Leu Cys Phe Pro Cys
<210> 535
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<211> 13
 <212> PRT
 <213> Conus textile
<400> 535
Asn Gly Val Cys Cys Gly Tyr Arg Met Cys Val Pro Cys
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<211> 12
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 <213> Conus textile
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Glx Thr Cys Cys Gly Tyr Arg Met Cys Val Pro Cys
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Glx Ala Cys Cys Gly Phe Lys Met Cys Val Pro Cys
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Ser Thr Cys Cys Gly Phe Lys Met Cys Ile Pro Cys Arg
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Asn Gly Val Cys Cys Gly Phe Trp Met Cys Ile Pro Cys Asn
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Asp Val Cys Cys Tyr Val Arg Met Cys Pro Cys Arg
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<212> PRT
<213> Conus imperialis
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Glx Cys Gly Gln Ala Trp Cys
<210> 542
<211> 8
<212> PRT
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<213> Conus stercusmuscarum
  <220>
  <221> PEPTIDE
  <222> (1)..(8)
  <223> Xaa is hydroxy-Pro
 <400> 542
  Gly Cys Xaa Trp Gln Pro Val Cys
  <210> 543
  <211> 11
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  <213> Conus arenatus
 <220>
 <221> PEPTIDE
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<223> Xaa is hydroxy-Pro
 <400> 543
 Glx Tyr Gly Cys Xaa Xaa Gly Leu Trp Cys His
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<213> Conus arenatus
 <400> 544
 Ala Ser Gly Cys Pro Trp Arg Pro Trp Cys
  <210> 545
         11
  <211>
  <212> PRT
  <213> Conus arenatus
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 Glx Tyr Gly Cys Pro Val Gly Leu Trp Cys Asp
  <210> 546
  <211> 9
  <212> PRT
  <213> Conus arenatus
  <400> 546
  Ser Gly Cys Pro Trp Gln Pro Trp Cys
  <210> 547
  <211> 9
  <212> PRT
  <213> Conus arenatus
  <400> 547
  Ser Gly Cys Pro Trp His Pro Trp Cys
  <210> 548
  <211> 30
<212> PRT
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<213> Conus ermineus
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<221> PEPTIDE
<222>
      (1)..(30)
<223> Xaa is hydroxy-Pro
<400> 548
Gly Cys Cys Gly Lys Tyr Xaa Asn Ala Ala Cys His Xaa Cys Gly Cys
Thr Val Gly Arg Xaa Xaa Tyr Cys Asp Arg Xaa Ser Gly Gly
<210> 549
<211> 25
<212> PRT
<213> Conus purpurascens
<400> 549
Gly Cys Cys Gly Ser Tyr Pro Asn Ala Ala Cys His Pro Cys Gly Cys
Lys Asp Arg Pro Ser Tyr Cys Gly Gln
<210> 550
<211> 23
<212> PRT
<213> Conus purpurascens
<400> 550
Glu Gly Cys Cys Ser Asn Pro Ala Cys His Pro Cys Gly Cys Lys Asp
Arg Pro Ser Tyr Cys Gly Gln
<210> 551
<211> 32
<212> PRT
<213> Conus arenatus
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Val Val Thr Glu Ala Cys Glu Glu Ser Cys Glu Glu Glu Glu Lys His
Cys Cys His Val Asn Asn Gly Val Pro Ser Cys Ala Val Ile Cys Trp
<210> 552
<211>
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<212> PRT
<213> Conus arenatus
<400> 552
Ile Val Thr Glu Ala Cys Glu Glu Ser Cys Glu Asp Glu Glu Lys His
Cys Cys His Val Asn Asn Gly Val Pro Ser Cys Ala Val Ile Cys Trp
                                25
<210> 553
<211> 32
<212> PRT
<213> Conus arenatus
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<400> 553
Ile Val Thr Glu Ala Cys Glu Glu His Cys Glu Asp Glu Glu Gln Phe
Cys Cys Gly Leu Glu Asn Gly Gln Pro Phe Cys Ala Pro Val Cys Phe
<210> 554
<211>
       32
<212> PRT
<213> Conus arenatus
<400> 554
Val Val Thr Gly Ala Cys Glu Glu His Cys Glu Asp Glu Glu Lys His
Cys Cys Gly Leu Glu Asn Gly Gln Pro Phe Cys Ala Arg Leu Cys Leu ^{20} ^{20} ^{20}
<210>
       555
<211>
       32
<212>
      PRT
<213> Conus distans
<400> 555
Asn Val Asp Gln Glu Cys Ile Asp Ala Cys Gln Leu Glu Asp Lys Asn
Cys Cys Gly Arg Thr Asp Gly Glu Pro Arg Cys Ala Lys Ile Cys Leu
<210>
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<211>
       32
      PRT
<212>
<213> Conus distans
<400> 556
Glu Thr Asp Gln Glu Cys Ile Asp Ile Cys Lys Gln Glu Asp Lys Lys
Cys Cys Gly Arg Ser Asn Gly Glu Pro Thr Cys Ala Lys Ile Cys Leu
<210>
       557
<211>
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<212> PRT
<213> Conus distans
<400> 557
Glu Thr Asp Gln Glu Cys Ile Asp Thr Cys Glu Gln Glu Asp Lys Lys
Cys Cys Gly Arg Thr Asn Gly Glu Pro Val Cys Ala Lys Ile Cys Phe
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<211>
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<212>
       PRT
<213> Conus purpurascens
<400> 558
Pro Lys Thr Glu Ala Cys Glu Glu Val Cys Glu Leu Glu Glu Lys His
1 5 10 15
```

<400> 563

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Cys Cys Cys Ile Arg Ser Asp Gly Pro Lys Cys Ser Arg Lys Cys Leu
Leu Ser Ile Phe Cys
<210> 559
<211> 32
<212> PRT
<213> Conus purpurascens
<400> 559
Val Val Ser Glu Glu Cys Lys Lys Tyr Cys Lys Lys Gln Asn Lys Asn
Cys Cys Ser Ser Lys His Glu Glu Pro Arg Cys Ala Lys Ile Cys Phe
<210>
       560
<211>
       32
<212>
      PRT
<213> Conus sponsalis
<400> 560
Ala Val Thr Glu Ala Cys Thr Glu Asp Cys Lys Thr Gln Asp Lys Lys
Cys Cys Gly Glu Met Asn Gly Gln His Thr Cys Ala Lys Ile Cys Leu
                                25
<210>
      561
<211> 37
<212> PRT
<213> Conus tulipa
<400> 561
Pro Lys Thr Lys Glu Cys Glu Arg Tyr Cys Glu Leu Glu Glu Lys His
Cys Cys -Cys Ile Arg Ser Asn Gly Pro Lys Cys Ser Arg Ile Cys Ile
Phe Lys Phe Trp Cys
        35
<210> 562
<211> 36
<212> PRT
<213> Conus tulipa
<400> 562
Pro Lys Thr Arg Glu Cys Glu Met Gln Cys Glu Gln Glu Glu Lys His
1 10 15
Cys Cys Arg Val Arg Asp Gly Thr Gly Gln Cys Ala Pro Lys Cys Leu
20 25 30
Gly Ile Asn Trp
        35
       563
<210>
<211>
      9
<212> PRT
<213> Conus geographus
```

```
Cys Phe Ile Arg Asn Cys Pro Lys Gly
<210> 564
<211>
<212> PRT
<213> Conus striatus
<400> 564
Cys Ile Ile Arg Asn Cys Pro Arg Gly
<210> 565
<211> 28
<212> PRT
<213> Conus arenatus
<400> 565
Gly Cys Thr Pro Pro Gly Gly Val Cys Gly Tyr His Gly His Cys Cys
Asp Phe Cys Asp Thr Phe Gly Asn Leu Cys Val Ser
<210> 566
<211> 27
<212> PRT
<213> Conus geographus
<400> 566
Ala Cys Ser Gly Arg Gly Ser Arg Cys Pro Pro Gln Cys Cys Met Gly
Leu Thr Cys Gly Arg Glu Tyr Pro Pro Arg Cys
<210> 567
<211> 31
<212> PRT
<213> Conus caracteristicus
<400> 567
Asn Cys Gly Glu Gln Gly Glu Gly Cys Ala Thr Arg Pro Cys Cys Ser
Gly Leu Ser Cys Val Gly Ser Arg Pro Gly Gly Leu Cys Gln Tyr
<210>
       568
<211>
       23
<212> PRT
<213> Conus textile
<400> 568
Asn Cys Pro Tyr Cys Val Val Tyr Cys Cys Pro Pro Ala Tyr Cys Glu
Ala Ser Gly Cys Arg Pro Pro
<210> 569
<211> 27
<212> PRT
<213> Conus delesstii
```

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<220>
<221> PEPTIDE
<222>
       (1)..(27)
      Xaa at residue 4 is hydroxy-Pro; Xaa at residues 13 and 16 is gam
<223>
       m-carboxy-Glu
<400> 569
Ala Cys Lys Xaa Lys Asn Asn Leu Cys Ala Ile Thr Xaa Met Ala Xaa
Cys Cys Ser Gly Phe Cys Leu Ile Tyr Arg Cys
<210>
      570
<211> 30
<212> PRT
<213> Conus lividus
<400> 570
Ser Cys Gly His Ser Gly Ala Gly Cys Tyr Thr Arg Pro Cys Cys Pro
Gly Leu His Cys Ser Gly Gly Gln Ala Gly Gly Leu Cys Val
<210> 571
<211>
       35
<212>
       PRT
<213> Conus lividus
<400> 571
Asp Cys Gly Glu Ser Gly Gln Gly Cys Tyr Ser Val Arg Pro Cys Cys
Pro Gly Leu Ile Cys Lys Gly Thr Gly Gly Gly Leu Cys Arg Pro
Ser Gly Ile
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<210> 572
<211>
       31
<212> PRT
<213> Conus miliaris
<400> 572
Cys Thr Pro Pro Gly Gly Leu Cys Tyr His Ala Tyr Pro Cys Cys Ser
Lys Thr Cys Asn Leu Asp Thr Ser Gln Cys Glu Pro Arg Trp Ser
            20
<210>
      573
<211>
      36
<212> PRT
<213> Conus miles
<400> 573
Cys Thr Asp Asp Ser Gln Phe Cys Asn Pro Ser Asn His Asp Cys Cys
Ser Gly Lys Cys Ile Asp Glu Gly Asp Asn Gly Ile Cys Ala Ile Val
                               25
Pro Glu Asn Ser
```

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35
<210> 574
<211>
       36
<212>
      PRT
<213> Conus miles
<400> 574
Cys Thr Glu Asp Ser Gln Phe Cys Asn Pro Ser Asn His Asp Cys Cys
Ser Gly Lys Cys Ile Asp Glu Gly Asp Asn Gly Ile Cys Ala Ile Val
Pro Glu Asn Ser
         35
<210> 575
<211>
       30
<212>
       PRT
<213> Conus pulicarius
<400> 575
Cys Ser Asp Phe Gly Ser Asp Cys Val Pro Ala Thr His Asn Cys Cys
Ser Gly Glu Cys Phe Gly Phe Glu Asp Phe Gly Leu Cys Thr
<210> 576
<211> 30
<212> PRT
<213> Conus quercinus
<400> 576
Ala Cys Ser Gln Val Gly Glu Ala Cys Phe Pro Gln Lys Pro Cys Cys
Pro Gly Phe Leu Cys Asn His Ile Gly Gly Met Cys His His
<210> 577
<211> 28
<212> PRT
<213> Conus striatus
<400> 577
Cys Leu Pro Asp Gly Thr Ser Cys Leu Phe Ser Arg Ile Arg Cys Cys
Gly Thr Cys Ser Ser Ile Leu Lys Ser Cys Val Ser
<210> 578
<211> 31
<212> PRT
<213> Conus tessulatus
<400> 578
Ser Cys Ala Glu Phe Gly Glu Val Cys Ser Ser Thr Ala Cys Cys Pro
Asp Leu Asp Cys Val Glu Ala Tyr Ser Pro Ile Cys Leu Trp Glu 20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}
```

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<210> 579
<211> 27
<212> PRT
<213> Conus textile
<400> 579
Lys Cys Val Glu Gln Trp Lys Tyr Cys Thr Arg Glu Ser Leu Cys Cys
Ala Gly Leu Cys Leu Phe Ser Phe Cys Ile Leu
<210> 580
<211> 29
<212> PRT
<213> Conus textile
<400> 580
Cys Val Glu Gln Trp Glu Val Cys Gly Ile Ile Leu Phe Ser Ser Ser
Cys Cys Gly Gln Leu Cys Leu Phe Gly Phe Cys Val Leu
<210> 581
<211> 32
<212> PRT
<213> Conus virgo
<400> 581
Asp Cys Gly Gly Gln Gly Glu Gly Cys Tyr Thr Gln Pro Cys Cys Pro
Gly Leu Arg Cys Arg Gly Gly Gly Thr Gly Gly Gly Val Cys Gln Leu
<210> 582
<211> 33
<212> PRT
<213> Conus wittigi
<400> 582
Phe Gly Ser Phe Ile Pro Cys Ala Arg Leu Gly Glu Pro Cys Thr Ile
Cys Cys Arg Pro Leu Arg Cys Arg Glu Ser Gly Thr Pro Thr Cys Gln
Val
<210>
       583
<211>
       30
<212> PRT
<213> Conus regius
<400> 583
Thr Cys Leu Glu His Asn Lys Leu Cys Trp Tyr Asp Arg Asp Cys Cys
Thr Ile Tyr Cys Asn Glu Asn Lys Cys Gly Val Lys Pro Gln 20 25 30
<210>
       584
<211>
       34
<212> PRT
```

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<213> Conus radiatus
<400> 584
Ala Cys Lys Ser Asn Tyr Asp Cys Pro Gln Arg Phe Lys Cys Cys Ser
Tyr Thr Trp Asn Gly Ser Ser Gly Tyr Cys Lys Arg Val Cys Tyr Leu 20 25 30
Tyr Arg
<210> 585
<211> 24
<212> PRT
<213> Conus purpurascens
<220>
<221> PEPTIDE
<222> (1)..(24)
<223> Xaa is hydroxy-Pro
<400> 585
Gly Xaa Xaa Cys Cys Leu Tyr Gly Ser Cys Arg Xaa Phe Xaa Gly Cys
1 10 15
Tyr Asn Ala Leu Cys Cys Arg Lys
<210>
       586
<211> 24
<212> PRT
<213> Conus purpurascens
<400> 586
His Pro Pro Cys Cys Met Tyr Gly Arg Cys Arg Arg Tyr Pro Gly Cys
1 10 15
Ser Ser Ala Ser Cys Cys Gln Gly
<210> 587
<211> 36
<212> PRT
<213> Conus consors
<400> 587
Ala Pro Glu Leu Val Val Thr Ala Thr Thr Thr Cys Cys Gly Tyr Asp
Pro Met Thr Ile Cys Pro Pro Cys Met Cys Thr His Ser Cys Pro Pro
Lys Arg Lys Pro
<210> 588
<211>
        39
 <212> PRT
<213> Conus aurisiacus
<400> 588
Glx Ser Trp Leu Val Pro Ser Thr Ile Thr Thr Cys Cys Gly Tyr Asp
 Pro Gly Thr Met Cys Pro Pro Cys Arg Cys Asn Asn Thr Cys Lys Pro
```

<210> 589 <211> 37

<212> PRT

<213> Conus consors

<400> 589

Ala Pro Glu Leu Val Val Thr Ala Thr Thr Thr Cys Cys Gly Tyr Asp

Pro Met Thr Trp Cys Pro Ser Cys Met Cys Thr Tyr Ser Cys Pro His 25

Gln Arg Lys Lys Pro 35

<210> 590

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8 C

Ende <211> 36 <212> PRT

<213> Conus magus

<400> 590

Ala Pro Glu Leu Val Val Thr Ala Thr Thr Thr Cys Cys Gly Tyr Asp

Pro Met Thr Ile Cys Pro Pro Cys Met Cys Thr His Ser Cys Pro Pro

Lys Gly Lys Pro

<210> 591 <211> 38

<212> PRT

<213> Conus aurisiacus

<400> 591

Glx Lys Trp Leu Val His Ser Lys Ile Thr Tyr Cys Cys Gly Tyr Asn

Lys Met Asp Met Cys Pro Pro Cys Met Cys Thr Tyr Ser Cys Pro Pro

Leu Lys Lys Lys Arg Pro

<210> 592 <211> 29

<212> PRT

<213> Conus aurisiacus

<400> 592

Ala Pro Trp Thr Val Val Thr Ala Thr Thr Asn Cys Cys Gly Ile Thr

Gly Pro Gly Cys Leu Pro Cys Arg Cys Thr Gln Thr Cys

<210> 593

<211> 13

20

25

30

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<400> 599
     Glx Asp Tyr Cys Cys Thr Ile Pro Ser Cys Trp Asp Arg Tyr Lys Glu
     Arg Cys Arg His Ile Arg
     <210> 600
     <211> 13
<212> PRT
<213> Conus miles
     <400> 600
     Asp Tyr Cys Cys His Arg Gly Pro Cys Met Val Trp Cys
     <210> 601
<211> 13
     <212> PRT
<213> Conus jDedius
<400> 601
    Gly Cys Cys Ser Asp Pro Arg Cys Arg Tyr Arg Cys Arg
    <210> 602
<211> 17
<212> PRT
<213> Conus omaria
     <400> 602
      Gly Cys Cys Ser His Pro Ala Cys Asn Val Asn Asn Pro His Ile Cys
     Gly
     <210> 603
     <211> 17
     <212> PRT
     <213> Conus omaria
     <400> 603
Gly Cys Cys Ser His Pro Ala Cys Asn Val Asn Asn Pro His Ile Cys
                                            10
      Gly
      <210> 604
      <211> 19
      <212> PRT
      <213> Conus quercinus
      <400> 604
      Glx Gly Cys Cys Ser Asp Pro Ala Cys Ala Val Ser Asn Pro Asp Ile
      Cys Gly Gly
      <210> 605
      <211> 17
      <212> PRT
      <213> Conus bandanus
      <400> 605
      Pro Glu Cys Cys Thr His Pro Ala Cys His Val Ser His Pro Glu Leu
```

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1
              5
                                   10
                                                       15
Cys
<210> 606
<211> 17
<212> PRT
<213> Conus marmoreus
<400> 606
Pro Glu Cys Cys Thr His Pro Ala Cys His Val Ser Asn Pro Glu Leu
Cys
<210> 607
<211> 15
<212> PRT
<213> Conus miles
<400> 607
Cys Cys Asn His Pro Ala Cys Ala Gly Lys Asn Ser Asp Leu Cys
<210> 608
<211> 16
<212> PRT
<213> Conus magus
<400> 608
Gly Cys Cys Tyr His Pro Thr Cys His Leu Glu His Ser Asn Leu Cys
<210> 609
<211> 17
<212> PRT
<213> Conus nobilis
<400> 609
Gly Cys Cys Glu Arg Pro Pro Cys Arg Trp Gln Asn Pro Asp Leu Cys
Gly
<210> 610
<211> 17
<212> PRT
<213> Conus atlanticus
<400> 610
Thr Cys Cys Ser Arg Pro Thr Cys Arg Met Glu Tyr Pro Glu Leu Cys
                                     10
Gly
<210> 611
<211> 21
<212> PRT
<213> Conus quercinus
<400> 611
Asn Glu Cys Cys Asp Asn Pro Pro Cys Lys Ser Ser Asn Pro Asp Leu
Cys Asp Trp Arg Ser
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<210> 612
<211> 16
<212>
      PRT
<213> Conus leopardus
<400> 612
Cys Cys Ser Asn Pro Ala Cys Asn Arg Tyr Asn Pro Ala Ile Cys Asp
<210> 613
<211> 17
<212> PRT
<213> Conus emaciatus
<400> 613
Asp Cys Cys Asn Phe Pro Ala Cys Ala Ala Ser Asn Pro Gly Leu Cys
Thr
<210> 614
<211> 14
<212> PRT
<213> Conus victor
<400> 614
Cys Cys Ser Ser Pro Pro Cys Phe Ala Ser Asn Pro Ala Cys
<210> 615
<211> 17
<212> PRT
<213> Conus cinereus gubba
<400> 615
Gly Gly Cys Cys Ser Phe Pro Pro Cys Ile Ala Asn Asn Pro Phe Cys
                                      10
Ala
 <210> 616
 <211> 15
<212> PRT
<213> Conus flavidus
 <400> 616
 Gly Cys Cys Ser Asn Pro Pro Cys Ser Tyr Leu Asn Pro Ala Cys
 <210> 617
 <211>
        16
 <212> PRT
 <213> Conus emaciatus
 <400> 617
 Asp Cys Cys Ser Asp Pro Pro Cys Ala His Asn Asn Pro Asp Cys Arg
                                       10
 <210> 618
 <211> 17
 <212> PRT
 <213> Conus generalis
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<400> 618
  Gly Cys Cys Ser Asn Pro Pro Cys Tyr Ala Asn Asn Gln Ala Tyr Cys
                                      10
· Asn
  <210> 619
  <211> 25
  <212> PRT
  <213> Conus wittigi
  <400> 619
  Asp Glu Cys Cys Ala His Pro Ser Cys Trp Lys Ala Glu Asp Leu Ile
  Cys Thr Asn Gln Arg Arg Arg Thr Leu
  <210>
        620
  <211>
        20
  <212> PRT
  <213> Conus caracteristicus
  <400> 620
  Gly Cys Cys Ala Ile Arg Glu Cys Arg Leu Gln Asn Ala Ala Tyr Cys
  Gly Gly Ile Ser
  <210> 621
<211> 19
<212> PRT
   <213> Conus betulinus
   <400> 621
   Ser Ala Thr Cys Cys Tyr Tyr Pro Pro Cys Tyr Glu Ala Tyr Pro Glu
   Ser Cys Leu
   <210> 622
   <211> 6
   <212> PRT
   <213> Conus magus
   <220>
   <221> PEPTIDE
   <222> (1)..(6)
   <223> Xaa is gamma-carboxy-Glu
   <400> 622
   Val Tyr Xaa Thr His Pro
   <210> 623
    <211> 14
    <212> PRT
    <213> Conus striatus
    <400> 623
    Trp Ser Trp Arg Met Gly Asn Gly Asp Arg Arg Ser Asp Gln
    <210> 624
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<211> 11
<212> PRT
<213> Conus quercinus
<400> 624
Asp Cys Gln Pro Cys Gly His Asn Val Cys Cys
<210> 625
<211> 29
<212> PRT
<213> Conus geographus
<220>
<221> PEPTIDE
<222> (1)..(29)
<223> Xaa is gamma-carboxy-Glu
<400> 625
Lys Phe Leu Ser Gly Gly Phe Lys Xaa Ile Val Cys His Arg Tyr Cys
Ala Lys Gly Ile Ala Lys Glu Phe Cys Asn Cys Pro Asp
<210>
       626
<211>
       6
<212> PRT
<213> Conus magus
<400> 626
Arg Pro Lys Asn Ser Trp
<210> 627
<211> 7
<212> PRT
<213> Conus magus
 <220>
 <221> PEPTIDE
 <222> (1)..(7)
 <223> Xaa is hydroxy-Pro
 <400> 627
 Ala Arg Xaa Lys Asn Ser Trp
 <210> 628
 <211> 6
 <212> PRT
 <213> Conus magus
 <220>
 <221> PEPTIDE
 <222>
       (1)..(6)
 <223> Xaa is hydroxy-Pro
 <400> 628
 Arg Xaa Lys Asn Ser Trp
 <210> 629
  <211> 71
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<212> PRT

```
<213> Conus geographus
<400> 629
Cys Cys Pro Ser Ser Lys Glu Asp Ser Leu Asn Cys Ile Glu Thr Met
Ala Thr Thr Ala Thr Cys Met Lys Ser Asn Lys Gly Glu Ile Tyr Ser 20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}
Lys Lys Pro Val Thr Asp Tyr Gln Cys Gln Thr Arg Asn Ile Pro Asn 50 60
Pro Cys Gly Gly Ala Ala Leu
<210> 630
      65
<211>
<212>
      PRT
<213> Conus geographus
<400> 630
Asp Glu Ser Lys Cys Asp Arg Cys Asn Cys Ala Glu Leu Arg Ser Ser
Arg Cys Thr Gln Ala Ile Phe Cys Leu Thr Pro Glu Leu Cys Thr Pro 20 30
Ser Ile Ser Cys Pro Thr Gly Glu Cys Arg Cys Thr Lys Phe His Gln
Ser Arg Cys Thr Arg Phe Val Glu Cys Val Pro Asn Lys Cys Arg Asp
 Ala
 65
 <210> 631
       60
 <211>
 <212> PRT
 <213> Conus geographus
 <400> 631
 Thr Cys Thr Ser Thr Met Ser Cys Arg Gly Thr Cys Arg Lys Glu Trp 20 \\ 25 \\ 30 \\
 Pro Cys Trp Glu Glu Asp Cys Tyr Cys Thr Glu Ile Gln Gly Gly Ala 35
 Cys Val Thr Pro Ser Glu Cys Lys Pro Gly Glu Cys
 <210> 632
 <211> 43
<212> PRT
 <213> Conus radiatus
 <400> 632
 Gly Cys Val Tyr Glu Gly Ile Glu Tyr Ser Val Gly Glu Thr Tyr Gln
```

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200
Ala Asp Cys Asn Thr Cys Arg Cys Asp Gly Phe Asp Leu Ala Thr Cys
Thr Val Ala Gly Cys Thr Gly Phe Gly Pro Glu
<210> 633
<211> 86
<212> PRT
<213> Conus striatus
<400> 633
Ser Gly Pro Ala Asp Cys Cys Arg Met Lys Glu Cys Cys Thr Asp Arg
Val Asn Glu Cys Leu Gln Arg Tyr Ser Gly Arg Glu Asp Lys Phe Val
Ser Phe Cys Tyr Gln Glu Ala Thr Val Thr Cys Gly Ser Phe Asn Glu
Ile Val Gly Cys Cys Tyr Gly Tyr Gln Met Cys Met Ile Arg Val Val 50 \  \  \,
Lys Pro Asn Ser Leu Ser Gly Ala His Glu Ala Cys Lys Thr Val Ser
Cys Gly Asn Pro Cys Ala
<210>
       634
<211>
       24
<212> PRT
<213> Conus purpurascens
<400> 634
Asp Cys Cys Gly Val Lys Leu Glu Met Cys His Pro Cys Leu Cys Asp
 Asn Ser Cys Lys Asn Tyr Gly Lys
 <210> 635
 <211>
        36
 <212> PRT
 <213> Conus geographus
 <400> 635
 <400> 635
Gly Glu Pro Ile Pro Thr Thr Val Ile Asn Tyr Gly Glu Cys Cys Lys
15
 Asp Pro Ser Cys Trp Val Lys Val Lys Asp Phe Gln Cys Pro Gly Ala 20 25 30
 Ser Pro Pro Asn
 <210> 636
 <211> 16
<212> PRT
 <213> Conus generalis
 <400> 636
 Gln Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Pro Cys Cys Val Pro
```

Leu Gly Cys Leu

```
<210> 637
<211>
      20
<212> PRT
<213> Conus tessulatus
<400> 637
Asp Gly Cys Pro Pro His Pro Val Pro Gly Met His Lys Cys Met Cys
Thr Asn Thr Cys
<210> 638
<211> 84
<212> PRT
<213> Conus radiatus
<400> 638
His Pro Thr Lys Pro Cys Met Tyr Cys Ser Phe Gly Gln Cys Val Gly
Pro His Ile Cys Cys Gly Pro Thr Gly Cys Glu Met Gly Thr Ala Glu 20~ 25~ 30 ^{\circ}
Ala Asn Met Cys Ser Glu Glu Asp Glu Asp Pro Ile Pro Cys Gln Val
Phe Gly Ser Asp Cys Ala Leu Asn Asn Pro Asp Asn Ile His Gly His
```

Cys Val Ala Asp Gly Ile Cys Cys Val Asp Asp Thr Cys Thr Thr His